

# WHOLESALE REFERENCE OFFER\*

## WHOLESALE ACCESS

## SERVICE LEVEL AGREEMENT

\*Fibrus offer wholesale access in areas where public funding has been used. Fibrus Networks is currently building the wider Network to achieve optimal performance and to support future Services. As such, the Services listed herein are the beta versions pending full Network construction and operability. Fibrus Networks will inform you of product availability during the onboarding and ordering process.

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## 1. Introduction

This Wholesale Access Service Level Agreement (SLA) is designed for use by Retail Service Providers (RSPs) who are Wholesale partners of Fibrus Networks (Fibrus). For information on how to become a Wholesale partner with Fibrus please see our guide *How to Become a Wholesale Customer* available at <https://hyperfastni.com/wholesale-partners>.

This document should be read in conjunction with the Fibrus' current Fibrus Networks Wholesale Services Framework Agreement, Wholesale Price List, Wholesale Ethernet Access Services Product Specification and Wholesale Access Order & Fulfilment documentation, which is available on the Fibrus website at <https://hyperfastni.com/wholesale-partners>.

## 2. Scope

This document applies to Wholesale Ethernet Access Services, provided over Fibrus Network's network and ordered by registered RSPs, describing the respective maintenance and support services with applicable Service Levels (SLA).

## 3. Fibrus Network Performance & Targets

Fibrus network is monitored across the backhaul and access network to ensure the network availability is in line with industry standards (99.5%) Network availability and performance as measured at the network to network interface (NNI) and for Wholesale Access Services the targets are:

	Target
Network Availability	99.95%
Network utilisation	average <60%
	less than full utilisation for >90% of busy hour

Network metrics do not include any failure attributable to:

- Scheduled network maintenance (Planned Outages)
- Force Majeure events

The above metrics are provided for network planning and performance review purposes only. Service credits are applied on a per-incident basis specific to the contracted service level.

## 4. Fibrus Ethernet Access Service Ordering & Installation

The ordering and fulfilment process is detailed in the Wholesale Access Order & Fulfilment document. Fibrus has developed the Operator Wholesale Gateway (OWG) to provide functionality for Service Fulfilment and Service Assurance processes to RSPs. It is the interface for RSPs to place and manage all orders related to provision and amending service for Ethernet Access Services to end customers. RSPs can access the OWG via a Portal or defined

API giving direct access to the same status and vital information to manage their customers. RSPs can access relevant order types; provide, cease, upgrade and downgrade services for their end customers. Management of access is provided by Fibrus' wholesale team and it is the RSPs responsibility to administer and assure appropriate use by their personnel.

#### 4.1 Ordering & Provision Service Levels

The following table sets out the Service Levels which are available to RSPs for wholesale services. They will be measured against recorded provision of service orders as outlined in this Service Level Agreement.

Service Level	Code	Wholesale SLA	Target response / provision time	Target
Standard	L2C1	Order Acknowledged Order Confirmed	1 hour End of next Working day	99%
Standard	L2C2	Orders receive an offer of an appointment	Within 10-Working days.	90%
Standard	L2C3	Order completed	By CCD or 10 working days*	95%
Standard	L2C3	Order completed	By CCD or 20 working days*	100%

\*SLA subject to region

Response time is measured from the receipt of a valid RSP order. Once a valid order has been received the Fibrus provisioning team will inform the RSP of the Customer Completion Date (CCD) which will be the nearest available slot to the CRD requested. The CCD will not be < 5 working days from order.

## 5. Fibrus Maintenance and Support Services

Fibrus operates to a principle of enabling RSPs to manage their customers directly. The OWG provides RSPs with direct access to monitor end customer service and network performance, initiate, track and close trouble tickets via the OWG Portal or defined API. As such, it is a fundamental principle that RSPs must prove any service issues or faults are outside its own network and equipment before raising a trouble ticket.

RSPs will be provided with access to assist them in trouble shooting service problems for end customers with direct access to the same information available to Fibrus wholesale team. Where an RSP cannot identify and remediate the customer issue, a trouble ticket can be raised within OWG for the attention of Fibrus.

### 5.1 Trouble Ticket Resolution Process

Trouble tickets should only be raised when the RSP has identified the trouble as being within the Fibrus network or cannot localise the source of the customer trouble. The five key steps in trouble ticket resolution are:

- Trouble ticket reported – RSP
- Trouble diagnosis and isolation – Fibrus
- Trouble repair - Fibrus
- Trouble ticket updated and closed – Fibrus
- Customer updated - RSP

To complete diagnosis and repair the Fibrus wholesale team may be required to contact the end customer directly e.g. for access. Fibrus will not open or close tickets directly with end customers.

### 5.2 RSP Service Levels:

The following table sets out the Service Levels which are available to RSPs for Wholesale Access Services and each service has a Service Level provided as standard, please refer to the Wholesale Product Specification for applicable service levels.

These Service Levels will be measured against recorded Outages on a monthly basis according to the terms of this Service Level Agreement.

Service Level	Code	Target response Time	Target Restoration Time	Wholesale SLA
Standard	FSLAS	1 working day	2 working days	88% in 2-Working days of being notified and 97% within 5-Working days after completion date committed
Plus	FSLAP	8 working hours	1 working day	
Gold	FSLAG	4 hours	24 hours	

### 5.3 Target Response Time

Response time is measured from the start of the service clock (see Section 6) until the Engineer has completed the initial diagnosis and commenced the repair process, including attending on-site if required.

Response will be based on the Service Level in force for the RSP based on the Services affected and prioritised according to the severity of the problem and the overall number of end-users affected (see Incident Severity below).

### 5.4 Target restoration Time

Target Restoration Time defines the time to restoration of service measured from the start of the service clock.

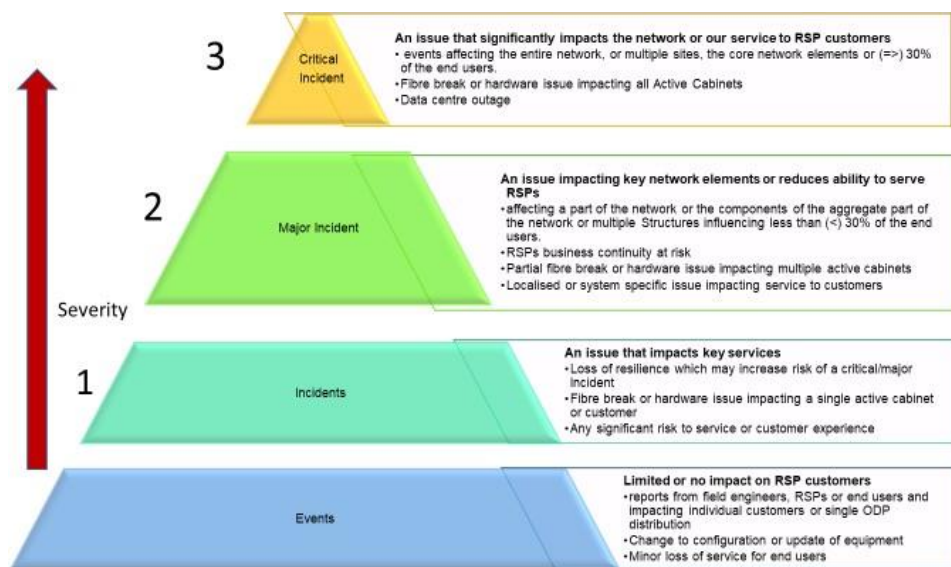
Once the fault has been identified and the site set up, if the fault is due to a fibre break, the size of Fibre Core affected will determine the likely restoration time. The table below details typical repair times, following testing, isolation, location and identification of the faulty component, which will vary from incident to incident:

Fibre Repair Times				
Optic FIBRE Cable Size		Set up & joint Preparation	Splicing Activity	Total (hours)
12 Core		0.75	0.5	1.25
24 Core		1	1	2

48 Core		1	2	3
72 Core		1	3	4
96 Core		2	4	6
144 Core		2	6	8

## 5.5 Incidents

Incidents are classified by incident type/severity in 3 levels.



Major Incident Management Pyramid  
Adapted from ITU-T E.409

**Critical incidents** are defined as events affecting the entire network, or multiple sites, the core network elements or (=>) 30% of the end users.

**Major Incidents** are defined as those affecting a part of the network or the components of the aggregate part of the network or multiple Structures influencing less than (<) 30% of the end users.

**Incidents** are defined as those affecting single Structures, and/or components at the edge of the network that do not interrupt service or performance.

**Events** are business as usual reports from field engineers, RSPs or end users and impacting individual customers or single ODP distribution.



Incident Response and Recovery Plans in place for our key network components and operating systems.

Fibrus will initially determine and agree the incident severity with the RSP customer. Severity categorisation will be adjusted during restoration. For example, if an incident of severity 1 is temporarily repaired, then the incident may be reduced to severity 2.

When Fibrus declare the incident is fixed, or in the absence of a response from the RSP for information, incident status is set to resolved.

## 5.6 Incident Reporting

The primary method of reporting incidents to Fibrus should be by email to [fibruswholesale@Fibrus.com](mailto:fibruswholesale@Fibrus.com) followed by a telephone call to the Fibrus Wholesale Partners support desk.

Fibrus operates a 24/7/365 support service via a dedicated telephone support service for all RSPs who have ordered Services with a Gold Service Level. 24 hour Support for Gold customers are:

Office hours: 0321 12345 (08:00 – 20:00 Monday-Friday)

Out of hours: 0123 54321 (20:00 – 08:00 Mon-Fri and Weekend)

For all reports RSPs should provide

- Wholesale partner name and contact name
- Contact telephone number
- Site address where the fault is
- Service or Account reference number (Sxxxxxx Number)
- Description of the problem
- the Service Level ordered for their end-user
- Volume of end-users impacted
- What happened prior to the incident
- How the incident has been diagnosed

## 5.7 Responsibilities

RSPs are expected to undertake Level 1 and Level 2 diagnostic checks themselves and share the results provided via email.

### Fibrus Responsibilities

- Escalated incident diagnosis, resolution and any necessary internal escalation
- Proactive monitoring of the active network and overall network performance
- Planned / Unplanned outage notification via email & ticketing
- Notification on status and availability of the network

### RSP Responsibilities

- Notifying Fibrus of any changes to site and contact details
- Level 1 and Level 2 diagnostics and 'troubleshooting' (detailed below)
- Reporting incidents through email and ticketing portal
- Access to end-user sites for fault resolution
- Adherence to Fibrus Acceptable Use Policy

## 5.8 Escalation Process

Should an RSP require to escalate a trouble ticket for resolution this can be done by contacting their Wholesale Relationship Manager. Trouble tickets may only be escalated where they are beyond SLA parameters.

## 5.9 Diagnostics and Troubleshooting

Diagnostics/ Triage Level	Responsibility	Diagnostic or Troubleshooting activity, including:
Level 1	RSP	End-User wiring and equipment
		ONT status (lights)
		Connections to ONT
		Electrical connections in end-user premises

Level 2	RSP	Configurations inc. firewall and third party devices/ONT
		Connection type (wifi/hardwired)
		Devices connected (number, age, OS, and type)
		Ping to google via direct connected device
		Policy defined in firewall or end-user devices
		RSP or 3rd party router configuration
		Time and frequency of intermittent connection loss
Level 3	Fibrus	Fibre status
		ONT status
		IP
		Active cabinet status
		Ports and PON status
		VLAN
		Power and equipment status

## 6. Service Clock & Outages

An Outage is notified to Fibrus following communication from the RSP in compliance with the requirements above.

### 6.1 Service Clock

The service clock starts when the Outage has been acknowledged by Fibrus Wholesale Service centre and severity level agreed and assigned. The initial diagnosis work has been completed and communications have been activated.

Fibrus will notify the RSP with regular e-mail updates on progress of service restoration and estimated restoration times. Updates are also posted on the website service status information.

For out of hours notification of outages the service clock is set at the start of the following working day.

The Service Clock stops when the Outage is closed or the RSP is informed of service restoration, whichever is sooner. Outage incidents may be left open, post service restoration, for monitoring purposes.

The service clock pauses when the Fibrus technical team has had to stop their diagnosis due to an outstanding response from the RSP. The clock restarts when the requested information has been provided.

**Multiple Short Service Failures:** If the same circuit experiences multiple failures within the same month, this is a single Outage for the purposes of service restoration. The service clock shall be restarted from the point the subsequent failure has been diagnosed.

The Service Level for restoration will be considered to have been achieved where we provide a temporary fix to restore services within the relevant time with the probability of re-attending of hours to perform a permanent fix.

## 6.2 Outages

Fibrus may need to turn off parts of the network to undertake essential maintenance or upgrades to its equipment and software. There may also be a need to purposely undertake a system outage in an emergency situation. These network interruptions will normally be restricted to parts of the network and for short durations with interrupted service restored as soon as practicable.

### Planned Outages

It is recognised that Planned Outages are a necessary, normal and regular occurrence. Where a Planned Outage will impact on the Ethernet Access Services provided to an RSP, the RSP will be notified by email, including a description of the outage, customer impact, date, time and expected duration. Fibrus will endeavour at all times to carry out Planned Outages during the preferred hours of 00:00 to 06:00.

Fibrus will normally inform the RSP 28 days in advance of a planned engineering outage. The RSP will be consulted on the best time to undertake the service interruption.

Emergency outages will be treated as MIM and communications plans followed accordingly.

For planned outages the RSP will normally be informed 28 days in advance.

Fibrus will provide information on the planned outage as follows:

- Reference number
- The planned work to be undertaken
- The location and premises impacted
- The planned start date and time.
- The planned end date and time.
- The services impacted
- Contact details for the manager responsible for the works
- Escalation contact details in the event of delayed restoration

Planned network maintenance shall normally be performed outside of normal business hours and is also published on our website at [www.fibrus.com/network-status](http://www.fibrus.com/network-status).

#### Unplanned Outages

Where an outage occurs that impacts on multiple end-customers, Fibrus will inform RSPs to enable them manage operations and customer expectations effectively.

In exceptional circumstances emergency engineering work without prior notice may be required. In that event, Fibrus will notify RSPs as soon as practicable and will use reasonable endeavours to limit any resultant adverse effects on the RSPs end-user service.

## 7. Excused Service Delays

In addition to any term of the contract between the RSP and Fibrus the Service Levels do not apply to the following situations:

Where factors outside of our reasonable control result in us being unable to gain access to our network to carry out a repair or provision activity, our target response times and target restoration times may be suspended until access can be achieved. Examples include (but are not limited to) being unable to:

- a) Close a road to access network in the carriageway
- b) Deploy Traffic Management required for health and safety reasons
- c) Gain access into a datacentre or secure area within a datacentre
- d) Gain access to a site requiring access permissions, or to the end customer site

e) Travel to or access to a site due to extraordinary weather conditions

Or where service failure is due to:

- Performance of the public internet;
- The RSP's own network or equipment or any other network or equipment outside the Fibrus Network;
- The RSP is in breach of any part of its Contract with Fibrus or Fibrus suspends the Service or any part of it in accordance with its Contract;
- because of circumstances beyond its reasonable control, Fibrus is unable to carry out any necessary work at, or gain access to the Site or the RSP fails to agree an appointment date;
- Fibrus is unable to obtain any necessary permissions or consents required in connection with the performance of a particular service level;
- the failure is due to a Force Majeure event;
- the failure is due to an inaccurate Order being submitted by the RSP;
- the fault is not reported in accordance with the fault reporting requirements or an incomplete order is received

Service Levels do not apply to periods of planned maintenance where appropriate notice has been given.

Service Levels for restoration time will not apply if an incident is caused by a service failure from one of our commercial PIA or Backhaul providers which is outside of our reasonable control to manage.

## 8. Service Credits & Call-out Charges

### 8.1 Call Out Charges

In the event of an Outage requiring an Engineer call out where no fault is found or the fault is not with the Fibrus network a call out charge will be added to the RSPs next monthly invoice. Call out charges are set out in the Wholesale Price List.

### 8.2 Service Credits

#### Service Failure Service credit

Service Failure T2R	Service Credit
>1% of Outages in any month fail to meet the Service Level for response time	10% of pro-rata monthly charge for the month in which the service failure occurred
>1% of Outages in any month fail to meet the Service Level for restoration time	10% of pro-rata monthly charge for the month in which the service failure occurred

Service Failure L2C	Service Credit
L2C Provision Order >20 working days beyond CCD	£4 per day for each end-user
Limited to 60 days maximum	



Service Credit claim conditions:

- The Outage was not an Excused Service Delay.
- Total service credits per month are limited to 100% of the monthly charge calculated pro-rata for that month.
- The RSP must notify Fibrus in writing within 15 working days after the end of the month for which credit is requested.
- Service credits will be applied as a credit to the wholesale partner's account and, as such, will be deducted from the value of the next invoice. Fibrus shall not in any circumstances be obliged to pay any money or make any refund to an RSP.
- Service credits will not be granted if there is any amount owing by the wholesale partner to Fibrus and such amount is overdue.
- Any Service Credits which are applied have been calculated as, and are, a genuine pre-estimate of the loss likely to be suffered by the wholesale partner.