



**Service Definition**  
**Wavelength Service**

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## 1 Overview

### 1.1 Introduction

This Service Definition describes Nexium's Wavelength Service from the customer's perspective. In this document the product is described in terms of an overview, service specification, service levels, orderable service options and technical specifications.

This document details standard aspects of Nexium's Wavelength Service. Specific customer requirements may vary, and the specifications and service levels presented are as per the base offering.

### 1.2 Product Overview

The Wavelength Service is a point to point service that provides high capacity connections between two sites. The Wavelength Service comprises a single wavelength in either direction between two sites allowing the customer to seamlessly extend their internal network, independent of protocol changes.

## 2 Service Specification

As shown in the diagram below, a Wavelength Service is comprised of:

- Optical Terminal device that provides the interface between the Nexium fibre optic cable and the customer's equipment.
- A wavelength that connects two sites in a point to point mode.



Nexium operates a number of optical networks in Queensland centres. A Wavelength Service will only be available within a metropolitan area network (MAN) in a regional centre. The Wavelength service will not be available between regional centres.

The Nexium Wavelength service enables a customer to utilise a point-to-point optical fibre to carry up to 1 Gbps of traffic between two locations. Nexium reserves the right, at any time during the provision of the service, to install Wave Division Multiplexing (WDM) equipment on the fibre cores and provide a dedicated wavelength to the customer instead. If Nexium elects to implement such a WDM system on an existing Wavelength service, it will provide reasonable notice and assistance to the customer to implement the required wavelength. Nexium will meet and discuss the most appropriate assistance with the customer in good faith and it may, in Nexium's absolute discretion, take the form of a discount, payment or additional services at no charge.

### User Network Interface

A customer accesses a Wavelength service at the UNI, and the UNI defines the point of service responsibility between Nexium and the customer. The physical interface is provided as a pair of single mode G.957 Compliant FC Connectors on a termination panel.

## 3 Service Levels

Standard Wavelength Service Levels are described in the Master Service Agreement. Any variation to these Service Levels under a Contract will be subject to agreement on a Service by Service basis, taking into account the specific Service characteristics, the requirements of the End User and price.

### 3.1 Target Service Levels

The Service Level Tables below also include Target Service Levels for some metrics.

### 3.2 Severity Level Definitions

Some of the Service Level metrics include reference to Severity Levels, being the severity designation assigned to Problems. The Severity Levels are defined as follows:

**Severity Level 1** – A total loss of a service element or error rate that renders the service unavailable, or any fault that poses a hazard to the safety of the customer’s or supplier’s personnel, or the general public.

**Severity Level 2** – a partial loss of a service element component; or a reduction in link traffic carrying capacity (degradation), Service still usable but impaired.

**Severity Level 3** – anomalies in transmission performance; or any non-service affecting alarms.

**Severity Level 4** – indicates all other reasonable problems or requests.

A customer may request that an incident be treated as a higher Severity Level if the customer reasonably believes that the business impact of the incident is greater than the Severity Level classification assigned.

### 3.3 Service Availability

| <b>Metric: Service Availability</b> |  |
|-------------------------------------|--|
| Metric Definition                   | Measures the availability of each Service.<br><br>“Available” in relation to the Service means that the Service is accessible to the customer, and able to transmit customer data across the Nexium network, as measured at the Measurement Point specified below.<br><br>Availability is measured on a per service basis. |
| Measurement Period                  | 24x7   |
| Target Service Level                | 99.95% for service delivery within or between Regional Centres or Brisbane   |
| Applicable Rebate                   | N/A  |
| <b>Measurement Methodology</b>      |  |
| Measurement Point                   | Measured using Nexium’s Incident Management System, from time the incident is reported until restoration of service is achieved.   |

|                          |   |
|--------------------------|---|
| Calculation              | $\text{Actual Availability \%} = \left[ \frac{(\text{Actual Hours Available} + \text{Excusable Downtime})}{\text{Available Hours}} \right] * 100$ <p>Where:</p> <p><b>Actual Hours Available</b> means the amount of time within the Available Hours that the Service was actually Available.</p> <ul style="list-style-type: none"> <li>• Downtime will commence on notice from customer.</li> <li>• Completion of downtime will be based on NOC advising customer service is restored.</li> </ul> <p><b>Excusable Downtime</b> means the aggregate time within the Available Hours that the Service is not Available due to:</p> <ul style="list-style-type: none"> <li>• any Scheduled Downtime; and</li> <li>• any other excusable event under the Customer contract. Includes in the first instance Force Majeure, compliance with laws / direction of a Regulator, Customer or End User caused outages and suspensions as an alternative to right of termination.</li> </ul> <p><b>Available Hours</b> means 24 hours, 7 days a week every day of the year.</p> |
| Period of Calculation    | Calculated on a calendar monthly basis  |
| Frequency of Measurement | Wavelength services are not actively monitored by Nexium.   |
| Data Source              | Wavelength services are not actively monitored by Nexium.   |
| Reporting Responsibility | Network Operations Centre   |
| Reporting Frequency      | Monthly – to be provided within 10 Business Days of the end of the relevant calendar month.   |
| Reporting Requirements   | <ul style="list-style-type: none"> <li>• Reports to be provided in soft copy.</li> <li>• All relevant support data required to verify the Service Level calculations to be provided or made available in an acceptable format.</li> <li>• Reports to include the information set out in the “Calculation” section, details of actual performance against Minimum Service Level (in graphic representation where possible), details of outages, causal analysis and remedial and preventative actions.</li> </ul>  |

## 4 Support Service Levels

### 4.1 Incident Management

| Metric: Incident Management |  |
|-----------------------------|--|
| Metric Definition           | <p>Measures the successful completion of incident response, resolution and communication processes for each incident. Incident management measures the percentage of incidents where response and resolution targets were met and communication processes followed.</p> <p>Incident Management targets are a function of the severity of the Incident.</p> |
| Measurement Period          | 24 x 7   |
| Target Service Levels       |  |

|                            | Response (By Telephone)  | Restoration<br>(Excludes reasonable travel time to site from closest concentration of the applicable personnel, ie: Rockhampton, Townsville, Toowoomba for Regional Centres) | Communication Updates                       |
|----------------------------|--|--|---|
| <b>Severity Level 1</b>    | 95% within 30 minutes  | 95% within 4 hours   | Every 30 minutes                            |
| <b>Severity Level 2</b>    | 95% within 30 minutes  | 95% within 8 hours   | Every 60 minutes                            |
| <b>Severity Level 3</b>    | 95% within 30 minutes  | 95% within 5 business days   | Once per day                                |
| <b>Severity Level 4</b>    | 95% within 1 business day (e-mail or telephone response)   | 95% within 10 business days or as otherwise agreed   | Weekly notification of outstanding problems |
|                            | Faults that are a result of a fibre cut by the Supplier or the Supplier's Personnel - 12 hours (excluding reasonable travel times from Townsville / Rockhampton / Toowoomba to the relevant site)  |  |   |
|                            | Faults that are a result of a fibre cut by any person other than the Supplier or the Supplier's Personnel: - Force Majeure conditions apply and the Supplier will use best endeavours to restore.  |  |   |
| Applicable Rebate          | N/A  |  |   |
| Measurement Methodology    |  |  |   |
| Measurement points         | As recorded in Nexium's Incident Management system.  |  |   |
| Calculation                | N/A  |  |   |
| Period of Calculation      | Calculated on a per incident basis   |  |   |
| Frequency of Measurement   | Monthly  |  |   |
| Data Source                | Nexium Fault Management System.  |  |   |
| Measurement responsibility | Network Operations Centre  |  |   |
| Reporting Frequency        | Monthly – to be provided within 10 Business Days of the end of the relevant calendar month.  |  |   |
| Reporting Requirements     | <ul style="list-style-type: none"> <li>• Reports to be provided in soft copy</li> <li>• All relevant support data required to verify the Service Level calculations to be provided or made available in an acceptable format</li> <li>• Reports to include, details of actual performance against Target Service Level (in graphic representation where possible), details of causal analysis and remedial and preventative actions to be provided.</li> </ul> |  |   |

## 4.2 Change Management

| Metric: Change Management |   |
|---------------------------|---|
| Metric Definition         | <p>Measures successful completion of operational change activities.</p> <p>Successful completion means a change that has been completed or backed out in accordance with the agreed change window and process and that does not introduce unforeseen problems subsequent to implementation of the change.</p> |

|                                |  |
|--------------------------------|--|
| Scheduled Hours                | N/A  |
| Minimum Service Level          | 95% of changes successfully completed in accordance with scheduled change window.  |
| Target Service Level           | 98% of changes successfully completed in accordance with scheduled change window.  |
| Applicable Rebate              | N/A  |
| <b>Measurement Methodology</b> |  |
| Measurement point              | N/A  |
| Calculation                    | % = Successful Changes/Total Changes x 100   |
| Period of Calculation          | Measured for each change.  |
| Frequency of Measurement       | Monthly  |
| Data Source                    | Change Management tracking data base and related records.  |
| Measurement responsibility     | Network Operations Centre  |
| Reporting Frequency            | Monthly – to be provided within 10 Business Days of the end of the relevant calendar month.  |
| Reporting Requirements         | Reports to be provided in soft copy<br>All relevant support data required to verify the Service Level calculations to be provided or made available in an acceptable format, including number and reason for planned outage. |
|                                |  |

## 5 Technical Specifications

### 5.1 Specification

| UNI Attribute      | Description   | Parameter   |
|--------------------|---|---|
| Physical           | The physical media utilised by the customer.<br>Note Nexium will provision services only to the customer UNI.     | Single Mode Optic Fibre (G652 D)  |
| Bandwidth          | Maximum bandwidth.  | 1000 Mbps (IEEE 802.3z)   |
| Customer Interface | Physical Connector type on which Nexium will present the single mode fibres for the service                       | TIA/EIA 604-4A Compliant (FC Connector)   |
| Wavelength         | Wavelength of light to be used by customer equipment when transmitting data across the Nexium Wavelength Service. | Nominally 1310nm. (1000Base-LX). If WDM is installed Nexium will allocate the required wavelength.. |