



# WAVELENGTH

## Scalable, high bandwidth connectivity

The ability to scale backhaul capacity rapidly and efficiently is essential in today's evolving telecommunications market. New generation of business and consumer applications are driving complex and diverse demand on bandwidths. Telstra Wholesale's Wavelength service caters for the increasing need for high capacity backhaul and reliable performance, with optional proactive monitoring to ensure a highly robust data transport solution.

### Wavelength overview

Our Wavelength service provides high bandwidth, point-to-point connectivity between network points of presence (PoP). Based on DWDM technology, the solution can provide you additional bandwidth efficiently as needed.

Delivered over Telstra's reliable and secure optical fibre network, our Wavelength service offers bandwidth options of 1Gbit/s Ethernet, 10Gbit/s Ethernet, 100Gbit/s Ethernet, 2.5Gbit/s SDH and 10Gbit/s SDH in capital city\* metro areas, along inter-capital routes and in major regional areas<sup>1</sup>.

Wavelength services offer a cost-efficient way to connect to National Broadband Network (NBN) Points of Interconnect (POI) at high bandwidths both in metro and regional areas. We can deliver Wavelength services to NBN POI as access becomes available.

## Using Wavelength

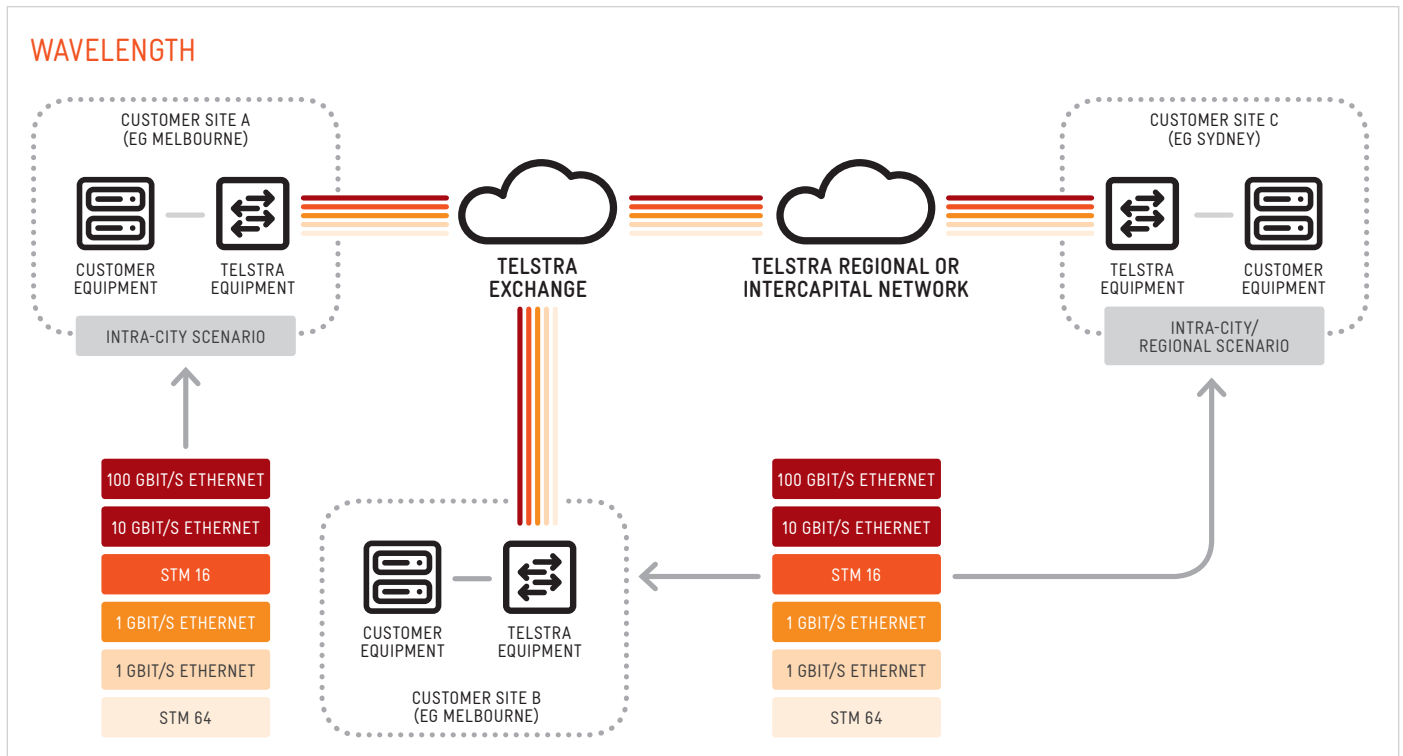
Our Wavelength service is ideal for Carriers, Systems Integrators and Service Providers seeking high bandwidth backhaul between their major PoPs and data centres.

It offers:

- Fixed backhaul for DSLAMs, NBN POIs (121 POIs as access becomes available)

- Mobile backhaul between major hub sites
- Core transport between customer PoPs and data centres
- A cost effective solution for delivering high bandwidth, point to point connectivity

- Protected service topology with a target of 99.95% Service Level Availability (SLA)<sup>2</sup>, where protection switching typically occurs in sub 50ms
- Unprotected service topology with a target of 99.7% SLA<sup>2</sup>.



## How Wavelength can benefit your business

- We offer a scalable point-to-point service with bandwidth options of 1Gbit/s, 2.5Gbit/s, 10Gbit/s or 100Gbit/s.
- With dedicated bandwidth, you can easily and confidently service a full suite of high bandwidth demanding applications.
- Wavelength services offer a cost-efficient way to connect to National Broadband Network (NBN) Points of Interconnect at high bandwidths both in metro and regional areas.
- Our fibre network coverage enables you to access diverse geographic markets and receive quality support from Telstra Wholesale.
- Telstra's 24x7 Global Operations Centre (GOC) provides capability for end-to-end network monitoring, maximising uptime and provides a great customer experience.

- You've got the option of proactive monitoring around the clock, to give you that extra confidence in your service availability. You can have peace of mind that your network is proactively being taken care of, while you focus on servicing your customers' needs.

## Getting connected

You can order Wavelength through the standard ordering process, via LinxOnline Ordering™ (LOLO®). If you don't have access, ask your Account Manager to get you set up.

Provisioning lead times will depend on the type of service you're ordering and where it is geographically located. You'll find indicative lead times and activation processes in our Ordering and Provisioning Manual (OPM), available from your Service Manager.

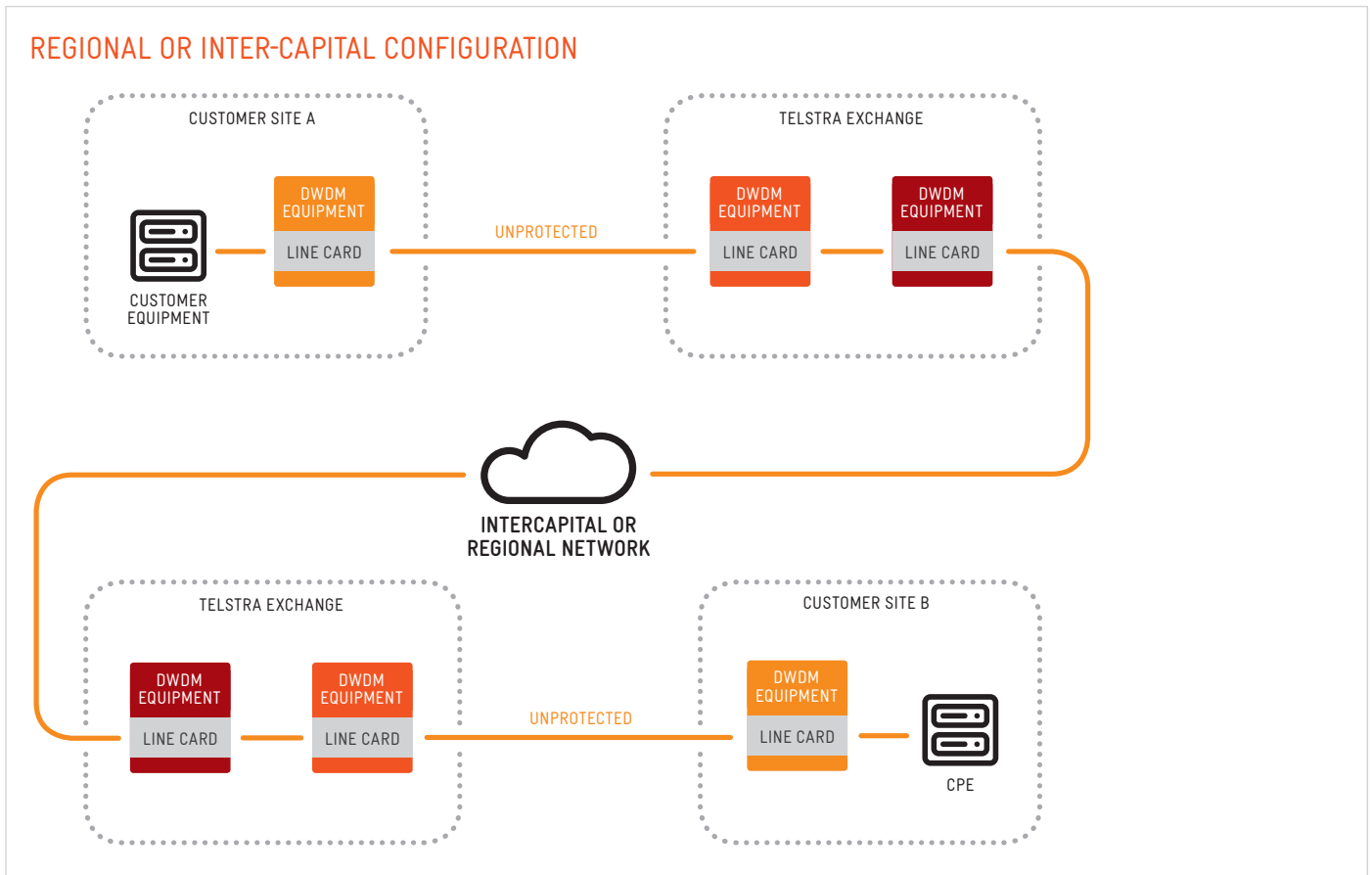
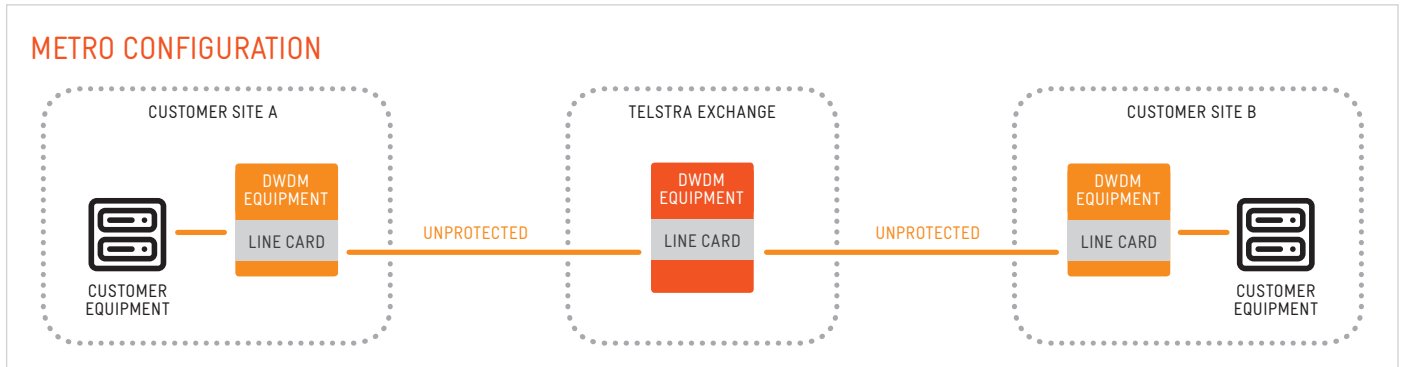
## Operations and maintenance

Wavelength is covered by a standard service assurance option, providing one hour response and 12 hours restoration target on customer fault reported. Enhanced assurance options are available at additional cost.

You can log faults around the clock using our LinxOnline Service™ (LOLS™) system or through the Telstra fault reporting centre.

## Unprotected Option

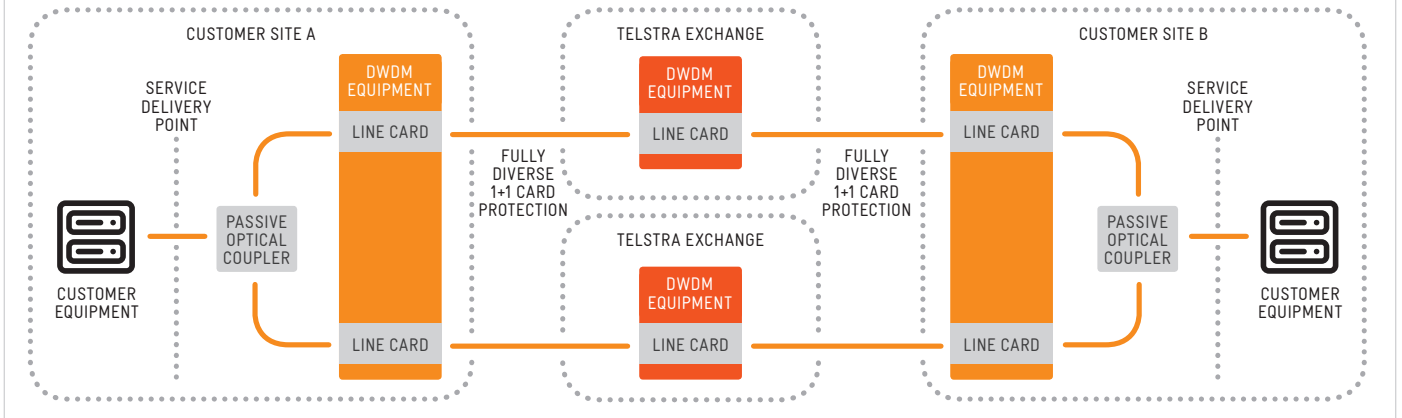
See below for an example of a point-to-point service with all traffic traversing a single unprotected fibre path within the transmission network.



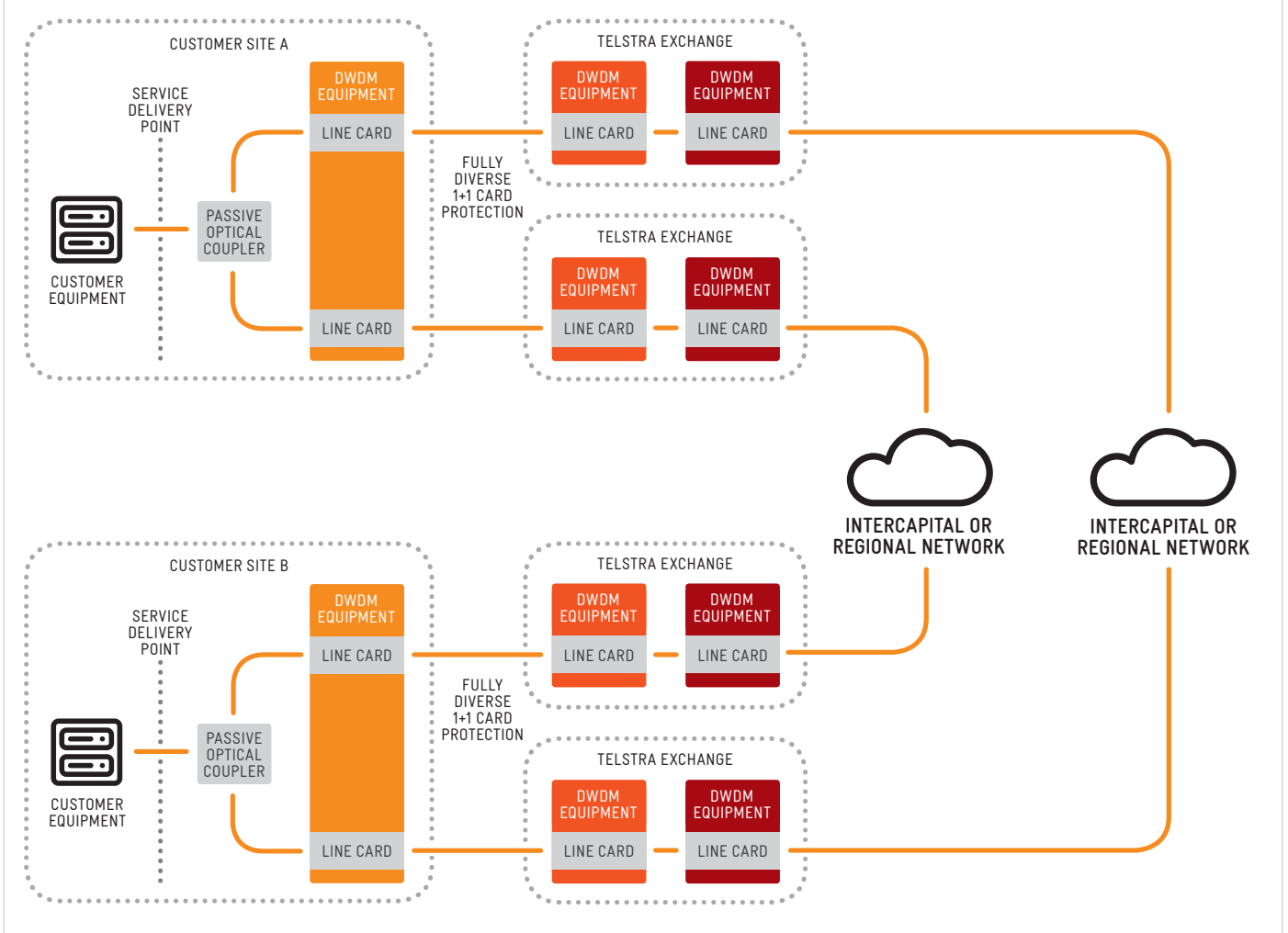
## Protection Option

See below for an example of a fully protected Wavelength service using dual path protection at the core network level to provide service continuity in the event of any network outage.

### METRO CONFIGURATION



### REGIONAL OR INTER-CAPITAL CONFIGURATION



# WHAT YOU CAN EXPECT WHEN YOU CHOOSE TELSTRA WHOLESAL FOR YOUR WAVELENGTH SERVICES

As always, when you are transitioning on to a new platform or employing a new solution, we understand the need for reassurance and certainty.

## Our experienced people

Telstra Wholesale offers an experienced and skilled team of dedicated specialists to help identify the Wavelength solution that best suits your needs. As an experienced supplier of backhaul services, we can tailor a backhaul migration path and rollout plan that meets your needs and minimises any network down time.

## Our unrivalled network

We're in the places where you need us, with national coverage across all networks and over 800 exchange areas supporting our Wavelength product. We pride ourselves on our consistency, service assurance and the cost efficiencies that we can drive from our market leader position as a supplier of wholesale data products.

## Our superior systems

Our proven, integrated systems capabilities and operational support help you manage your business needs with a range of online tools that help you price, order, support and review the ongoing performance of your Wavelength services.

## Product specifications – product attributes

Product	Wavelength
<b>Bandwidth options</b>	1Gbit/sE and 10Gbit/sE (Ethernet) 2.5Gbit/s and 10Gbit/s (SDH) 100Gbit/sE (Ethernet)
<b>Coverage<sup>3</sup></b>	Metro Inter-Capital Major Regional NBN POIs
<b>Service availability target<sup>2</sup></b>	99.7% (Unprotected) 99.95% (Protected)
<b>Resilience</b>	Unprotected Single Access and Protected Dual Access Options
<b>Proactive Monitoring</b>	Options for 24/7 proactive monitoring and fault repair (if needed) by a dedicated team at our Global Operations Centre
<b>Interfaces supported</b>	100GBase-LR4 1000Base-SX 850nm MMOF 1000Base-LX 1310nm SMOF 10Gbit/s E LR/LW 1310nm SMOF 10Gbit/s ER/EW 1550nm SMOF  STM-16 (S16.1) 1510nm SMOF SMOF STM-64 (I64.1/S64.2) 1310nm/1550nm SMOF
<b>Topology</b>	Point to Point
<b>Access technology</b>	Fibre (DWDM)

## Product specifications – environmental attributes

Service Delivery Point Equipment Requirements	
<b>AC supply</b>	240 V single phase
<b>DC supply (alternate where available)</b>	- 48 VDC nominal
<b>Operating temperature range</b>	10 to 35 degrees Celsius
<b>Rack space requirements</b>	There are currently four standard types of Wavelength equipment configuration to cater for a range of customer requirements  Minimum rack space requirement is 350mm (W), 600mm (D), 1800mm (H)  Maximum rack space requirement is 600mm (W), 600mm (D), 2200mm (H)

[telstrawholesale.com.au/wavelength](http://telstrawholesale.com.au/wavelength)

\* Sydney, Melbourne, Brisbane, Adelaide, Perth, Canberra 1. Subject to feasibility study and approval. 2. Target availability for Wavelength is based on a rolling 12-month period. Telstra makes no guarantee or representation about the actual availability of Wavelength. 3. Coverage is subject to feasibility study and approval. The spectrum device and <sup>TM</sup> are trade marks and <sup>®</sup> are registered trade marks of Telstra Corporation Limited, ABN 33 051 775 556.