WAVELENGTH

High bandwidth connectivity

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 diverse and reliable optical fibre network, our Wavelength service offers bandwidth options of 1Gbit/s Ethernet, 10Gbit/s Ethernet, 100Gbit/s Ethernet, 400Gbit/s Ethernet[1], in capital city metro areas, along inter-capital routes and in major regional areas[2].

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.
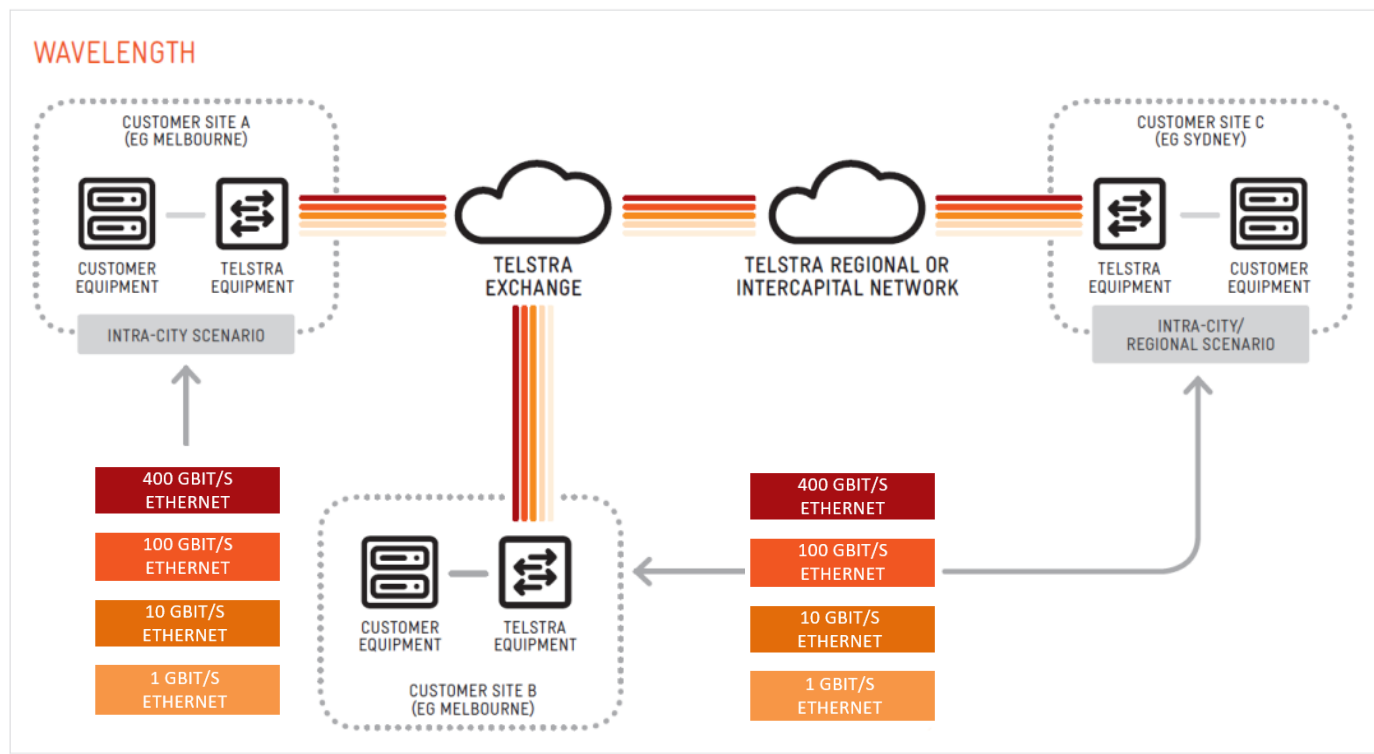
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Using Wavelength

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

- 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)[3], where protection switching typically occurs in sub 50ms
- Unprotected service topology with a target of 99.7% SLA[3].

How Wavelength can benefit your business

- We offer a point-to-point service with bandwidth options of 1Gbit/s, 10Gbit/s, 100Gbit/s OR 400Gbit/s[1].
- 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.
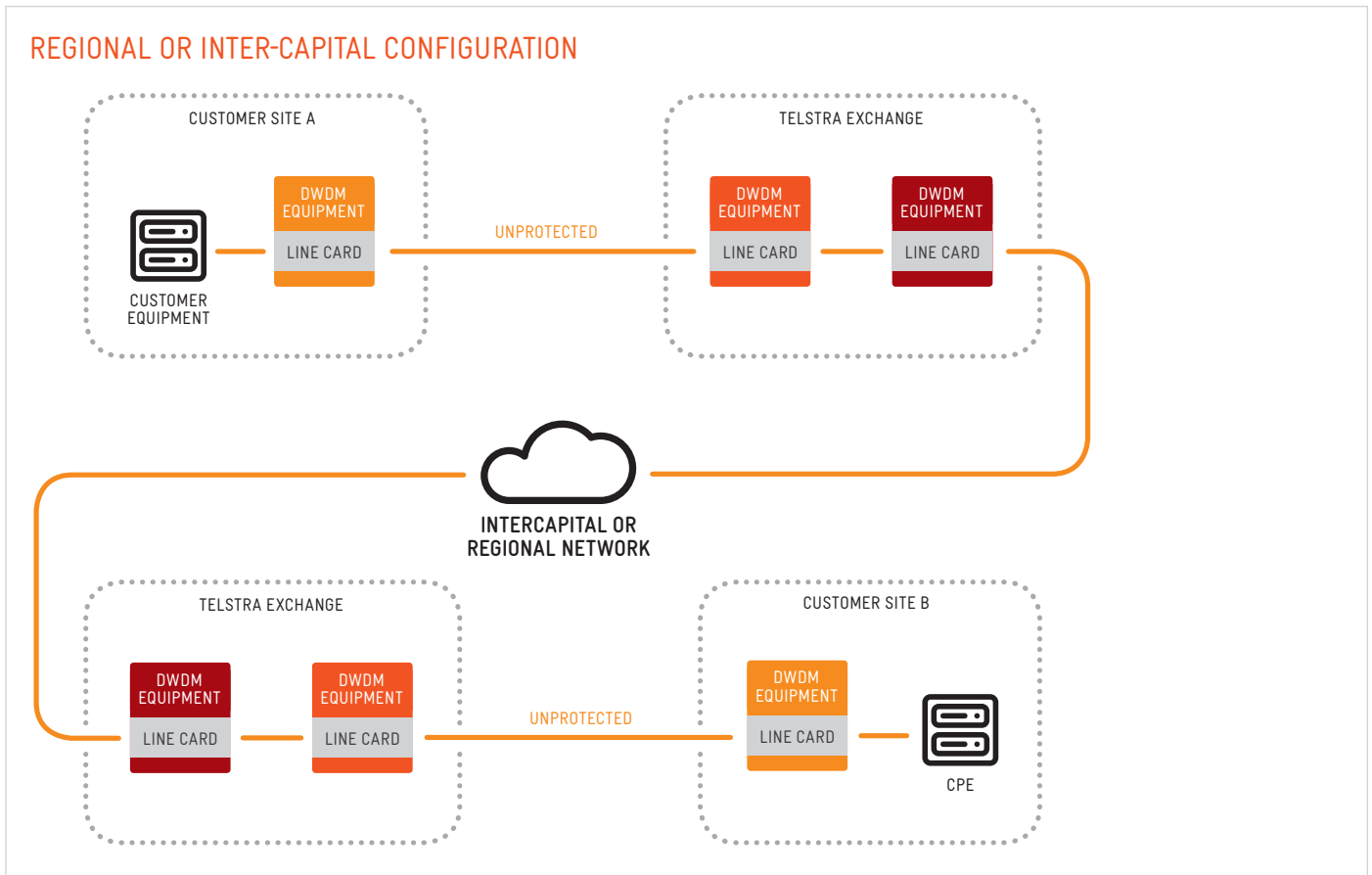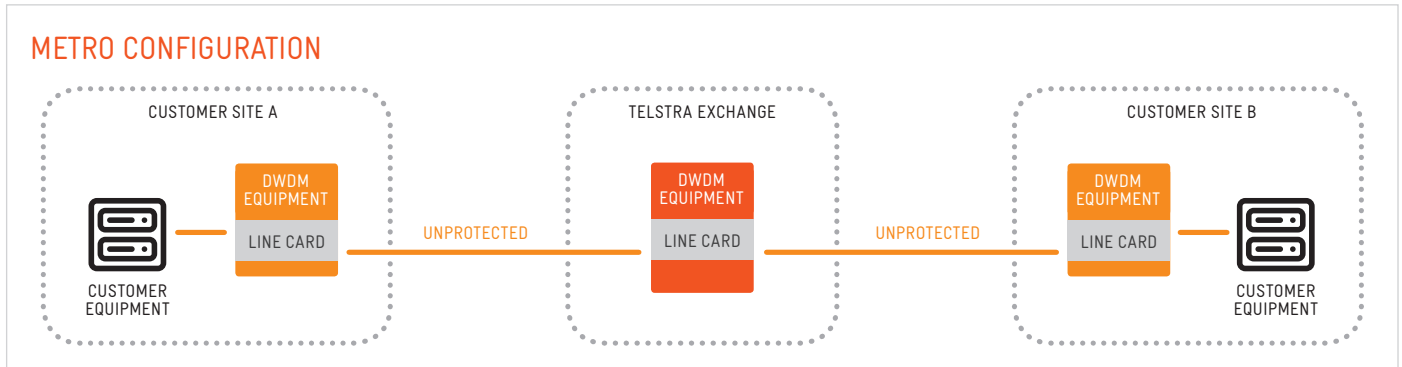
Operations and maintenance

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 anytime using TW Hub or by calling the Telstra FRC on 180 22 88 and selecting "2" (or such other number that Telstra may advise from time to time).
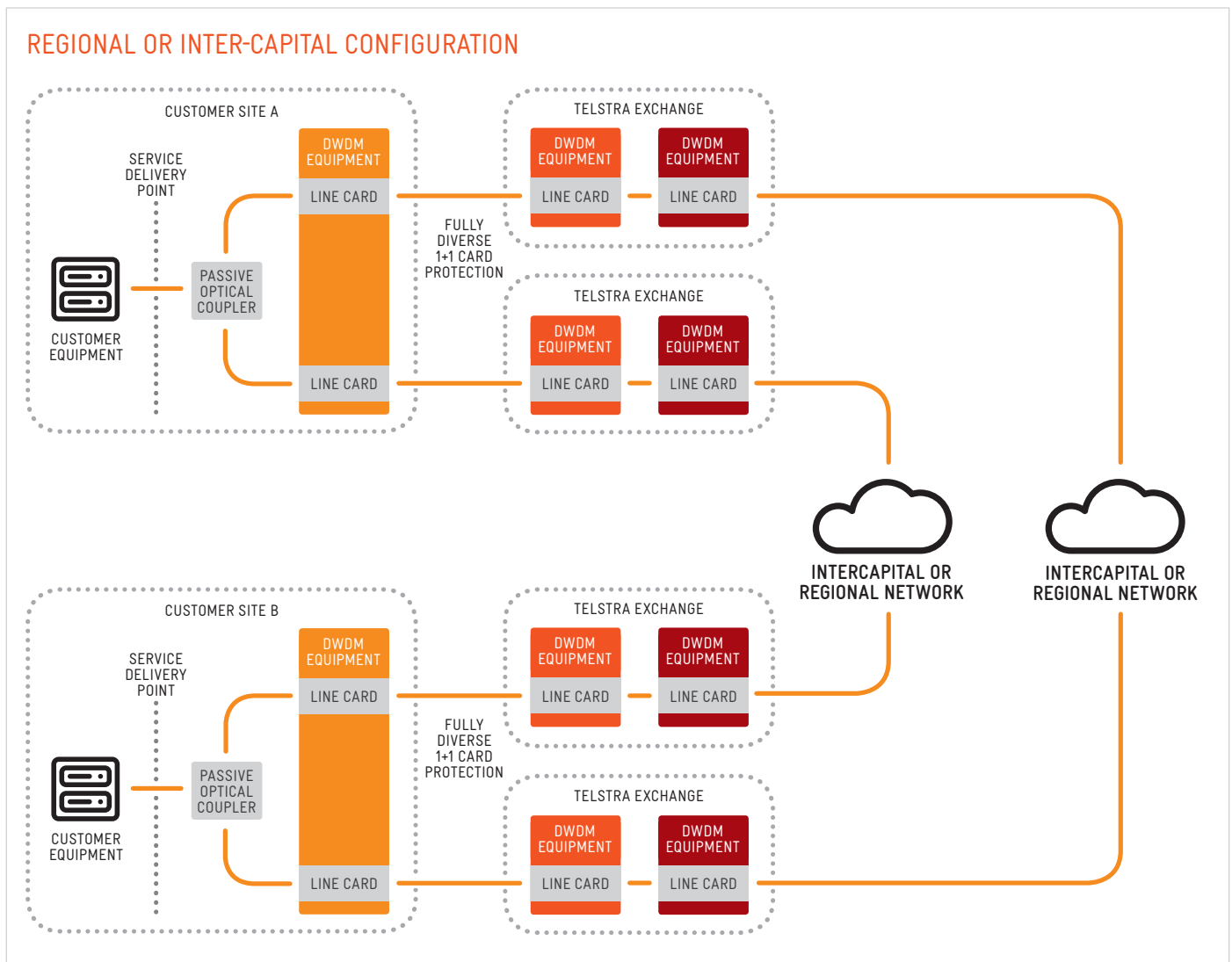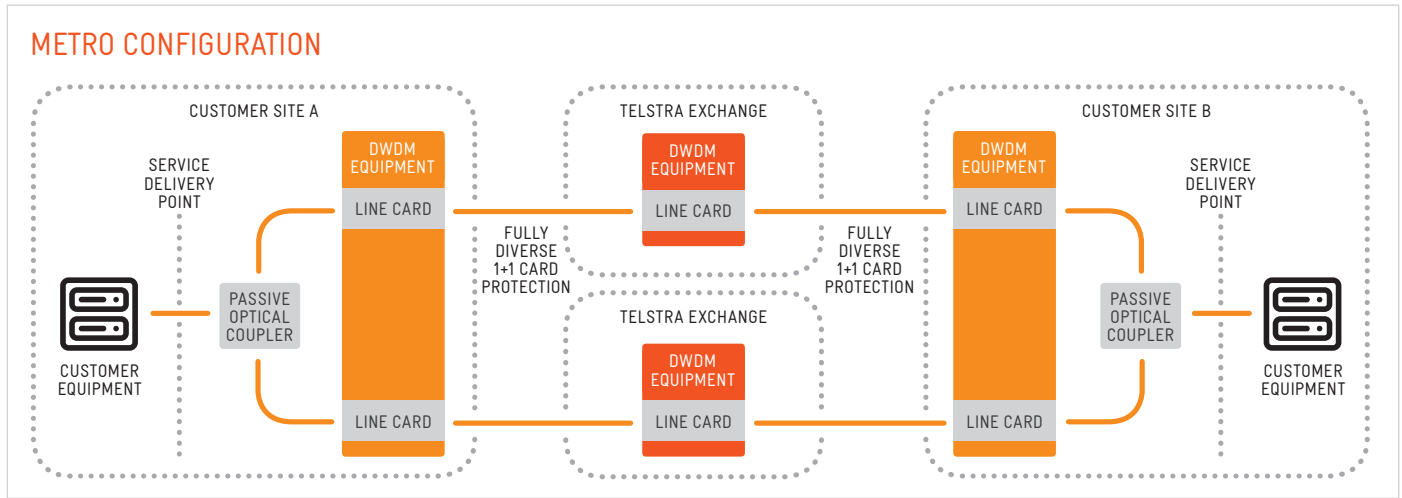
Unprotected Option

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

METRO CONFIGURATION

CUSTOMER SITE A

CUSTOMER EQUIPMENT

DWDM EQUIPMENT

LINE CARD

UNPROTECTED

TELSTRA EXCHANGE

DWDM EQUIPMENT

LINE CARD

UNPROTECTED

CUSTOMER SITE B

DWDM EQUIPMENT

LINE CARD

CUSTOMER EQUIPMENT

REGIONAL OR INTER-CAPITAL CONFIGURATION

CUSTOMER SITE A

CUSTOMER EQUIPMENT

DWDM EQUIPMENT

LINE CARD

UNPROTECTED

TELSTRA EXCHANGE

DWDM EQUIPMENT

LINE CARD

DWDM EQUIPMENT

LINE CARD

INTERCAPITAL OR REGIONAL NETWORK

TELSTRA EXCHANGE

DWDM EQUIPMENT

LINE CARD

DWDM EQUIPMENT

LINE CARD

UNPROTECTED

CUSTOMER SITE B

DWDM EQUIPMENT

LINE CARD

CPE

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 WHOLESALE 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
Bandwidth options	1Gbit/s, 10Gbit/s, 100Gbit/s and 400Gbit/s (Ethernet)
Coverage[4]	Metro Inter-Capital Major Regional NBN POIs
Service availability target[1,3]	99.7% (Unprotected) 99.95% (Protected)
Resilience	Unprotected Single Access and Protected Dual Access Options
Proactive Monitoring	Options for 24/7 proactive monitoring and fault repair (if needed) by a dedicated team at our Global Operations Centre
Interfaces supported	400GBase-LR4/FR4 100GBase-LR4 1000Base-SX 850nm MMOF 1000Base-LX 1310nm SMOF 10GBit/s E LR/LW 1310nm SMOF 10GBit/s ER/EW 1550nm SMOF
Topology	Point to Point
Access technology	Fibre (DWDM)

Product specifications – environmental attributes

Service Delivery Point Equipment Requirements	
AC supply	240 V single phase
DC supply (alternate where available)	– 48 VDC nominal
Operating temperature range	10 to 35 degrees Celsius
Rack space requirements	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)

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