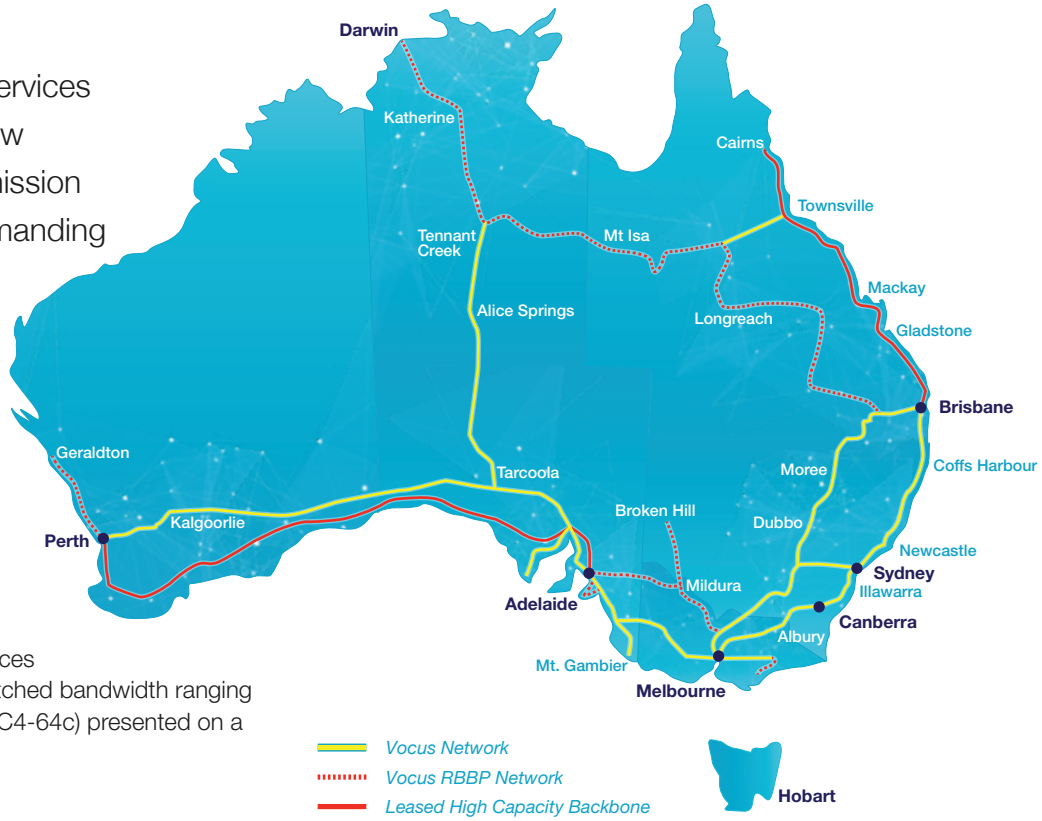
VOCUS

Regional Backbone Blackspots Program

data sheet

RBBP Transmission Services

Vocus RBBP Transmission services are premium performance, low latency, carrier grade, transmission services ideally suited for demanding backhaul applications.



Transmission SDH

Suitable for wholesale customers requiring uncompromising quality, Vocus 'RBBP Transmission SDH' services are available with dedicated circuit switched bandwidth ranging from 50Mbit/s (VC-3) to 9600Mbit/s (VC4-64c) presented on a range of standard SDH interfaces.

Transmission Ethernet

Suitable for wholesale customers requiring transmission grade Ethernet, our 'RBBP Transmission Ethernet' services offer dedicated circuit switched bandwidth between 10Mbit/s and 10Gbit/s presented on a range of standard Ethernet interfaces.

24x7 Network Monitoring

Our Service Management Centre provides ongoing end-to-end monitoring around the clock for both the Vocus and RBBP networks. All SDH elements are actively monitored and our in-line fibre monitoring system can pinpoint fibre faults to within a couple of meters across the country. Our technicians are on call to fix the faults any time of the day or night.

Site Classifications and Pricing Zones

Prices are dependent on the type of delivery location and the particular RBBP Route. Site types are:

- Carrier Point of Interconnect (CPoI)
- Backbone Point of Interconnect (BPoI)
- Nearest Capital City (selected Data Centres)
- Sydney (selected Data Centres)

Wholesale Only

Vocus RBBP Services are offered only on the RBBP network and to the wholesale market comprising:

- Licensed Carriers
- Carriage Service Providers
- Internet Service Providers
- Broadcast Transmission Providers
- Systems Integrators
- Utilities

Product	RBBP Transmission SDH	RBBP Transmission Ethernet
Interface Rates	STM-1, STM-4, STM-16, STM-64	100Mbit/s, 1000Mbit/s, 10Gbit/s
Frame structures	ITU-T G.707, VC-3's map into higher groups via TUG-3	GFP Framing of Ethernet on Virtually Concatenated SDH. (GFP-F over static VCAT VCG)
Physical Media	Single Mode Optical Fibre	Single Mode Optical Fibre
Physical Interface	SC Flat (NN presents Female)	SC Flat (NN presents Female)
Interface Type	ITU-T G.957 Interfaces: STM-1: L1.1, L1.2, STM-4: L4.1, L4.2 STM-16: L16.1, L16.2 ITU-T G.691 Interfaces: STM-64: I-64.1, S-64.2b	IEEE 802.3-2005 Interfaces: (As per IEEE802.3 subclause 1.4) 100Mbit/s: 100BASE-LX10 10Gbit/s: 10GBASE-LR
Service Rates	50Mbit/s to 10Gbit/s. Refer to specific service rate table	10Mbit/s to 10Gbit/s. Refer to specific service rate table
Interface features	Unprotected Interfaces Only	Unprotected Interfaces Only
Aggregating Interfaces	Not Available	Not Available
Latency	Optical delay plus small mapping delay	Optical delay plus small mapping delay
Jitter / Wander	Compliant with ITU-T Rec. G.825 and G.823	Not applicable
Bit Error Rate (End to End)	$< 10^{-10}$	Not applicable
Target Availability	End to End: 99.95% (Protected Services Only)	End to End: 99.95% (Protected Services Only)
Core Protection Options (where available)	Unprotected / Protected / Geographically Protected	Unprotected / Protected / Geographically Protected
Protection Switching	50ms on routes ≤ 1200km, but note that path distances may be significant.	50ms on routes ≤ 1200km, but note that path distances may be significant.
Access Protection	Unprotected	Unprotected
Commissioning standard	ITU-T M.2101	IETF RFC 2544
Customer to Provide	Rack space, 240V AC 50Hz power and cross-connects at customer sites where required.	

RBBP Transmission Ethernet Features

Service Type	Ethernet Private Line (EPL)
Ethernet Frame Structures	802.3, 802.1Q, 802.1AD
Maximum Ethernet Frame Size	9000 Octets (DA to FCS inclusive)
CE-VLAN ID Preservation	Yes
CE-VLAN CoS Preservation	Yes
Unicast Service Frame Disposition	Deliver Unconditionally
Multicast Service Frame Disposition	Deliver Unconditionally
Broadcast / Unknown Unicast Frame Disposition	Deliver Unconditionally
Layer 2 Control Protocols Processing	Tunnel All (0x01:80:C2:00:01 pause discarded)
Maximum number of EVC's per Port	1 (Single Service per Port)
Ingress Bandwidth Profile	Ingress Rate is limited by the VCG size with overheads as described in the Ethernet Service Speeds table (actual).
Ingress Bandwidth Committed Burst Size	> 50kByte
Link Pass Through (Link Loss Forwarding)	Unidirectional UNI-Status, Available on Request
Interface Configuration	Auto-Negotiate Enabled (Full Duplex, Full Rate)
Frame Loss Ratio	< 0.01% for In-Contract Traffic
Inter Frame Delay Variation	< 2ms for In-Contract Traffic