



INTERNET AND IP TRANSIT SERVICE SCHEDULE

1. DEFINITIONS

Defined terms in the Standard Terms and Conditions have the same meaning in this Service Schedule unless expressed to the contrary. In this Service Schedule, unless the context otherwise requires:

Aggregated Billing means the method of billing as described in clause 4.1(d).

Beam means WAN Solutions Pty Ltd (ACN 150 291 143)

Beam Network means any telecommunications network, equipment, or facilities, or cabling owned, controlled or utilised by Beam

Beam SLA means the Beam service level agreement which can be found at <http://www.beambarossa.com.au/legal>, as updated from time to time.

BGP means Border Gateway Protocol version 4.

Customer means the Customer described in the Service Order and any of its employees, sub-contractors, agents and representatives.

Data Plan means the method of billing as described in clause 4.1(b).

DDoS means distributed denial-of-service.

DDOS Protection Service means the distributed denial-of-service protection service which assists in attacks that attempt to make a Beam and/or Customer network unavailable to its intended users.

End Users mean a customer of the Customer.

Flat Rate means the method of billing as described in clause 4.1(a).

IP Burst means the method of billing as described in clause 4.1(c).

IP Transit provides Internet connectivity to the Customer's nominated location and includes both IP Transit and other Internet products offered by Beam from time to time.

Standard Terms and Conditions means the standard terms and conditions between Beam and the Customer governing the general terms and conditions of the Services provided under this Service Schedule and any applicable Service Order from time to time, available at <http://www.beambarossa.com.au/legal>.

Service means IP Transit service which includes, without limitation, the services known as Beam Internet Express, Beam Business Unlimited, Beam Enterprise Internet and DDOS Protection Service (where applicable).

Service Interface means the physical interface at the Service Delivery Point by which the Customer connects to the Service.

2. THE SERVICE

2.1 This Service Schedule applies to the delivery of Services across the Beam Network. This Service Schedule will apply to the first and any subsequent Service Orders executed by the Customer and Beam for the Services.

2.2. Beam will provide the Services to the Customer on the terms of the Standard Terms and Conditions (whichever is applicable), this Service Schedule and any applicable Service Orders, all of which are binding on the Customer. The Customer must use the Services (and, where applicable, will ensure that its End Users use the Services) in accordance with the terms of the Standard Terms and Conditions, this Service Schedule, any applicable Service Orders and all applicable laws.

2.3. Beam may vary the Service if reasonably required for technical, operational and commercial reasons provided such variation does not have a material adverse effect on the Customer.

3. PROVISION OF SERVICE

3.1. Beam maintains and operates the Beam Network under the Autonomous System Number 134743. Beam may add or remove Autonomous System Numbers from the Beam Network as required.

3.2. The Beam network includes peering and transit services with numerous networks to ensure redundancy, network resilience and network reachability. Beam reserves the right to add, change or remove peering and transit services, without notice.

3.3. Customers may exchange route information with Beam via the BGP.

3.4. Beam will supply the Customer a default route.

3.5. The Customer must not use BGP routing protocols or any other means to direct Customer bound traffic to Beam DDoS mitigation devices unless they have an active DDoS Protection Service in accordance with clause 13.

3.6. Beam will provide a standards based interface for the Customer to connect to the Beam access device at each agreed location. The Service Interface bandwidth must be equal to or greater than the bandwidth of the Service provided via the Service Interface.

3.7. Beam will deliver the Service at the speed, location and for the Initial Term specified in the Service Order.

3.8. A Service designated “Domestic” or “Domestic Only” on the Service Order is provided with Internet routes advertised to the Beam Network by our intra-country transit providers and peers only. International routes to the Internet are not included.

3.9. A Service designated “International” or “International Only” on the Service Order is provided with Internet routes advertised to the Beam Network by our international upstream transit providers and peers only. Intra country routes to the Internet are not included.

3.10. A Service designated as “Blended” on the Service Order will be provided with both intra-country (i.e. Domestic) and international routes from our transit providers and peers.

3.11. Where a Service is not designated “Domestic” or “International” then it is assumed to be Blended.

3.12. Where the Service is delivered into a data centre, Beam will terminate the Service in a common area or meet-me room, irrespective of any Beam Equipment to be situated in the Customer’s colocation facility. It is the responsibility of the Customer to arrange any cross connection cabling between the location at which the Service is terminated and the Customer’s equipment.

3.13. Beam reserves the right to undertake any action necessary to protect its network, including undertaking protection measures against a DDoS attack, and is not liable to the Customer as a result of such action.

4. BILLING

4.1. The Service may be billed using one of the following methods:

- (a) Flat Rate, where a fixed monthly amount is payable by the Customer based on the speed of the Service.
- (b) Data Plan, where a fixed monthly fee for a fixed amount of traffic is payable by the Customer and any excess usage is charged at the rate as listed in the Service Order.
- (c) IP Burst, where a fixed monthly amount for usage up to a fixed speed is payable by the Customer and an additional charge is payable in the event the Customer uses the Service above the fixed speed. In particular:
 - (i) The Service is billed using a 95th percentile billing method. The Service Order stipulates the amount of IP Transit the Customer purchased in Mbps (referred to as the 'Committed Speed') for a fixed monthly fee and the maximum speed at which transmission may occur (referred to as the 'Burst Speed').
 - (ii) Where the measured usage of the Service (in Mbps) is above the Committed Speed, a fee is payable for such usage above the Committed Speed ('IP Burst Fee') per Mbps and is listed on the Service Order. If the IP Burst Fee is not listed in the Service Order, it will be 25% more than the per Mbps fee for the Committed Speed.
 - (iii) The ratio of the Burst Speed to the Committed Speed shall not exceed 2:1 unless otherwise agreed by Beam. Bandwidth above the Committed Speed is subject to availability and is not guaranteed.
- (d) Aggregated Billing where two (2) or more ports may be billed as if it was a single port. For example, two (2) separate 100Mbps ports may be billed as 200Mbps. A charge for each additional port applies.
 - (i) Aggregated Billing may be combined with IP Burst, subject to the approval of Beam.
 - (ii) Where the Customer orders additional ports without also increasing the amount of IP Transit (in Mbps) or Committed Speed to match the total bandwidth supplied, the Service will be billed using Aggregated Billing with IP Burst and the IP Burst Fee payable by the Customer will be as stated in the Service Order or, where not stated in the Service Order, will be 25% more than the per Mbps fee for the associated IP Transit.

4.2. Aggregated Billing and IP Burst are not available in all locations or with all Services.

5. THIRD PARTY SERVICES

5.1. Where the Service provided by Beam includes equipment or transmission services from a Supplier, additional charges may apply for:

- (a) Cabling, network construction and other work to connect the Supplier's network to the network boundary point at the Customer's location;
- (b) Cabling and associated works between any network boundary point and the Customer's location;
- (c) Other items or services as charged by the Supplier from time to time.

6. IP ADDRESSES SUPPLIED BY BEAM

6.1. Customers may elect to use Beam supplied IP addresses which will be of type IPv4 and/or IPv6.

6.2. A single four (4) IPv4 subnet is provided at no charge for use between the Beam border router and the Customer router. Fees apply for any additional IPv4 addresses.

6.3. Any IP addresses allocated to the Customer by Beam remain the property of Beam and is not transferable.

6.4. The Customer's right to use the Beam supplied IP addresses ceases upon the termination of the agreement for supply of the Service, cancellation of the Service, or where Beam ceases to provide the Service to the Customer.

6.5. Beam reserves the right to change any Beam supplied IP addresses allocated to the Customer on at least 7 days' notice or immediately if an urgent change is required in order to maintain Beam network availability or stability or to correct a fault. Beam will work with the Customer in order to minimize any disruption to the Service during the change.

6.6. The Customer may request the reallocation of IP Addresses to an active Service which is subject to Beam's approval. Additional fees apply for reallocations of more than four (4) contiguous IP addresses. Depending on the size of the address reallocation, additional information may be required from the Customer in order for Beam to fulfil the request.

6.7. In the event the Customer cancels the Service to which the IP Addresses are attached, the IP Addresses may be allocated to the Services of other Beam customers.

6.8. Requests for more than 256 IP addresses are not generally available from Beam and should be referred to APNIC (Asia Pacific Network Information Centre) or the relevant Regional Internet Registry.

7. IP ADDRESSES SUPPLIED BY CUSTOMER

7.1. Customers may elect to supply their own IP Addresses in which case the Customer must ensure the timely payment of all fees due and payable to applicable Regional Internet Registries (including but not limited to APNIC).

7.2. In the event Beam is aware that the Customer has failed to make payment of any fee due and payable to the relevant Regional Internet Registry, Beam may terminate the relevant Service Order and invoice the Customer for any Fixed Term Charge due in respect of the Service for the remainder of the Initial Term.

8. BEAM BUSINESS UNLIMITED

8.1. Beam Business Unlimited (BBU) is a Service with the following limitations:

- (a) BBU is only available at the symmetrical speeds of 50Mbps, 100Mbps, 200Mbps or 400Mbps unless otherwise offered by Beam, from time to time;
- (b) BBU is only available to eligible customers in limited coverage areas as offered by Beam;
- (c) Customer must supply their own router;
- (d) BGP routing is not available; and
- (d) BBU is only available with Flat Rate billing. Data Plan billing, IP Burst and Aggregated Billing are not available.

8.2. BBU may not be used by Internet, hosting or other service providers as part of their own products or services or used to aggregate Internet traffic for more than one (1) End User.

8.3. A BBU service may be re-sold "as-is" to an End User.

8.4. BBU may not be sold for provision into a data centre, except where agreed to in writing by Beam.

8.5. Where the Customer is in violation of clauses 8.2, 8.3 or 8.4, Beam may suspend or cancel a service on two (2) days written notice.

9. BEAM ENTERPRISE INTERNET

9.1. Beam Enterprise Internet (BEI) is a Service with the following limitations:

(a) BEI is only available at the symmetrical speeds 10M, 20M, 50M, 100M, 150M, 200M, 250M, 300M then 100M increments to 1Gbps unless otherwise offered by Beam, from time to time;

(b) BEI is only available to eligible customers in limited coverage areas as offered by Beam;

(c) Customer must supply their own router;

(d) BGP peering is limited to one (1) Autonomous System Number only (i.e. no more than one Autonomous System may route traffic from the BEI service to the Beam network);

(e) BEI is only available with Flat Rate billing. Data Plan billing, IP Burst and Aggregated Billing are not available; and

(f) BEI is not available with link aggregation.

9.2. BEI may not be used by Internet, hosting or other service providers as part of their own products or services or used to aggregate Internet traffic for more than one (1) End User.

9.3. A BEI service may be re-sold “as-is” to an End User.

9.4. Where the Customer is in violation of clauses 9.2 or 9.3, Beam may suspend or cancel a service on two (2) days written notice.

10. ROUTE ANNOUNCEMENT, REGISTRATION AND FILTERING

10.1. The Customer must announce all prefixes for which the Customer wants to receive IP Traffic by way of BGP.

10.2. Beam will in all cases filter prefixes and AS Numbers it receives from the Customer.

10.3. The Customer must register all routes and downstream AS Numbers from which it wishes to receive traffic from Beam with the Beam support centre. Beam will update its own filters and advise its upstream providers and peers.

10.4. Beam may be required to update filters with some of its transit providers. Beam makes no guarantee that those providers will update their filters within the timeframe listed above.

10.5. By requesting the registration of a prefix or AS number, the Customer warrants that it is the owner or leaseholder of those resources, or is authorised by the owner or leaseholder to use that resource.

10.6. Should Beam receive a complaint about the Customer’s use of an Internet resource (such as IP block or AS number) Beam will resolve all such complaints in favour of the organisation listed in the APNIC (or relevant regional Internet registry) WHOIS database. In the event of a dispute, the onus is on the Customer to prove ownership of the resource. Should the Customer be unable to do this, any decision taken by Beam to not permit a prefix announcement will not be considered a breach of any SLA or covenant of this agreement.

10.7. Beam will not supply public AS numbers to the Customer. The Customer should contact APNIC for allocation of such resources.

11. SERVICES OVER COPPER

11.1. With respect to Services delivered over copper (including via Ethernet over Copper), the Customer acknowledges that:

(a) the speeds available to Customer are dependent on factors outside of Beam’s control including, without limitation, distance from the exchange, availability and quality of copper cabling and hardware; and

(b) the speeds specified in the Service Order are not guaranteed although the Customer will receive the maximum speed supported on the line up to the specified speed as specified in the Service Order.

12. DDOS PROTECTION

12.1. If ordered by the Customer with their Service in the Service Order, Beam must provide the Customer with a DDos Protection Service in accordance with this clause 12 (DDoS Protection Service).

12.2. The DDoS Protection Service provides protection against DDoS events that, in the sole opinion of Beam, require mitigation using traffic scrubbing, filtering, black holing or any other action in order to protect the Beam Network and/or the Customer's network. The Service Order will stipulate whether the Customer has procured one or both of the following components of the DDoS Protection Service:

(a) DDoS Detect – which comprises of DDoS and traffic reporting, DDoS event alerts.

(b) DDoS Protect – which comprises of the provision of on-net DDoS protection to automatically mitigate DDoS events detected by the Beam DDoS detection system at all times. The Customer may use BGP routing protocols or any other means to direct Customer bound traffic to Beam DDoS mitigation devices for the duration of the attack only. The Customer may also contact the Beam support centre to request Beam DDoS Protect if an attack was not detected by Beam DDoS Detect. Beam will in its sole discretion determine the method of mitigation to be used against a DDoS attack including, but not limited to, scrubbing, filtering and black holing of traffic. Scrubbing of DDoS traffic as an action to mitigate a DDoS attack is limited to the current capacity of the on-net scrubbing system within the Beam Network. At any given time, the current capacity will depend on the source of the attack traffic, the ingress route and type of traffic destined for the host under attack, the volume of concurrent traffic being scrubbed and other factors. Where a DDoS attack is larger than the scrubbing capacity of the Beam mitigation system, Beam may black hole traffic or use other methods at its disposal to mitigate the attack.

12.3. Customers who have only procured DDoS Detect may request that Beam provide DDoS Protect for a period of up to 24 hours for an additional fee by contacting Beam support centre via telephone. At the end of the applicable 24 hour period, Beam will cease providing Beam DDoS Protect unless notified by the Customer to continue for a further 24 hour period for an additional fee.

12.4. If the Customer has not ordered a DDoS Protection Service, that Customer may request, at no charge, mitigation of a DDoS attack in accordance with clause 12.3 once during the term of their IP Transit Service, after which that Customer must order a DDoS Protection Service.

12.5. The DDoS Protection Service provides volumetric DDoS protection, not protection against application level attacks. DDoS protection is not available if in the sole opinion of Beam:

(a) the traffic is not categorised as volumetric DDoS traffic, or

(b) the work required to identify, profile and mitigate the traffic is substantial, in which case Beam may charge a fee for service as agreed by the Customer.

12.6. A Customer who orders a DDoS Protection Service is entitled to access online systems via a single user ID as provided by Beam which includes information regarding DDoS events. The Customer may request access for additional users for a fee.

12.7. Each order for a DDoS Protection Service may be applied only to one Service (a single connection or an aggregated billing group of internet connections) provided by Beam under a Service Order. All IP addresses associated with that Service will be monitored. Additional charges apply if the Customer requires monitoring of additional IP addresses or a subset of a larger range of IP addresses already being monitored.

12.8. With respect to the DDoS Protection Service, Beam is not liable and otherwise excludes all liability in negligence or otherwise (whether under this agreement, any other Beam agreement or under any Beam SLA) in connection with, or in relation to:

(a) any traffic being rerouted away from the Customer or any delays or other changes to traffic caused by routing, filtering or cleaning of the Customer's traffic;

(b) DDoS events not detected or protected by Beam; or

(c) any traffic to, or from the Customer's Service that may be delayed, dropped or otherwise affected.

13. SERVICE LEVEL AGREEMENT

13.1. Subject to the terms of the Standard Terms and Conditions, this Service Schedule and any applicable Service Orders, Beam will provide the Services in accordance with the Beam SLA.