Peering Policy Clauses collected from 28 companies

Below are the categorized peering policy clauses found in the Study of 28 Peering Policies research. They are loosely categorized as an Excel spreadsheet and the actual clauses are listed here.

There are essentially two ways to create a Peering Policy:

- 1) select the clauses that best meet your needs.
- 2) select a starter Peering Policy (i.e. AT&T or Comcast) and add/delete clauses from there.

Aggregation

A good faith effort should be made to aggregate route announcements as much as practical. – Speakeasy

BLPA Contract Required

3.1. The Requester and AboveNet must enter into a bilateral Peering Agreement. – AboveNet

The two Internet Networks must enter into a Mutual Non-Disclosure Agreement and an Interconnection Agreement. – Verizon

Potential peers must be willing to enter into agreements with RCN, though no execution of agreements is presently required for public peering. Private peering with RCN requires the execution of a Bilateral Peering Agreement (BLPA). The transmission of a BLPA requires a non-disclosure agreement (NDA) be in place between the respective parties. All discussions regarding private peering are under NDA. – RCN

Willingness to enter into a Bilateral Interconnection Agreement and Non-Disclosure Agreement with Cox Communications. – Cox

Applicant agrees in writing to Tinet's peering policy – tinet

Private Peering shall be backed by a contract. – LambdaNet

Enter into a standard peering agreement and mutual non-disclosure agreement with New Edge Networks as requested. – NewEdge

Must enter into a NDA & Bilateral Interconnection Agreement and assume financial and provisioning responsibility for cross connects on an alternating/bilateral basis – Charter

Can't be a customer

Under no circumstances will Speakeasy maintain both a transit and peering relationship with a given network simultaneously. – Speakeasy

1.2.5 Existing IP Transit Customers of AboveNet are not eligible for peering. – AboveNet

The interconnection partner must not currently be or have been an IP transit customer of Internap in the recent past.

Under no circumstances shall the interconnection partner be a simultaneous peer and transit customer.

tw telecom does not peer with any network that is also a tw telecom transit customer.

RCN will not peer with any network that has been an IP transit customer within the past nine (9) months.

In order to qualify for settlement-free peering, the interconnecting partner may not have been a WBS Connect IP transit customer in the past six months. This applies to ASN 19080 or any other resold transit purchased from WBS Connect. – wbsconnect

Potential peers may not have been an Mzima IP transit customer during the previous 12 months. – Mzima

A network (ASN) that is a customer of a Comcast network for any dedicated IP services may not simultaneously be a settlement-free network peer. – Comcast

Applicant or Applicants's entities must not have any transit or peering relationship with Tinet or any other

Tinet entity or have had such a relationship in the 6 months prior to application. – tinet

Existing transit customers cannot be peers in the same region. – LambdaNet

A network (ASN) that is a BGP transit customer of OpenAccess or a partner network for any dedicated IP services may not simultaneously be a settlement-free peer of that same network. – OpenAccess

Not have been a New Edge Networks IP customer within the past (6) six months. – NewEdge

Potential peer must not be, or have been, an IP customer of Lightpath.net, or any busines grade IP service, within 6 months of requesting a settlement-free peer. – Cablevision

Under no circumstances shall the interconnection partner be a simultaneous peer and transit customer. – WVFiber

Generally, AS19151 does not peer with downstream transit customers of existing peering partners but this may be evaluated on a case-by-case basis. – WVFiber

A network (ASN) that is a customer of an AT&T US network for any dedicated IP services may not simultaneously be a settlement-free peer of that same network. – AT&T

Consistent Announcements

All announcements are to be consistent, in terms of prefix aggregation properties, across all interconnect locations. – Speakeasy

Hurricane Electric will announce consistent routes at each exchange point and expects peers to do the same. – Hurricane Electric

Each Internet Network will announce consistent customer routes at all interconnection points, unless both Internet Networks mutually agree otherwise based on special circumstances. -- ATDN

Both parties shall announce consistent routes across all interconnection points. – InterNap

tw telecom peers must maintain consistent route announcements across all peering sessions. – TW Telecom

Both parties shall announce consistent routes across all interconnection points. – nLayer

All peers are expected to offer consistant routes to facilitate closest-exit routing unless otherwise expressly agreed. This consistancy is expected in next-hop, origin, MED, and all other such decision-making attributes; non-conforming routes can be rewritten at the discretion of RCN. Agreements for best-exist or other forms of traffic exchange can be made in email.— RCN

NOT CONSISTENT: Due to the localised nature of BBC content, we reserve the right to advertise a different set of prefixes at each location. – BBC

Consistent route announcements at all exchange locations. – Cox

Both parties shall have consistent route announcements across all public and private interconnection points. – wbsconnect

DALnet requests that peers maintain consistent route announcements across all peering locations. – Dalnet

Peers must advertise consistent route announcements at all locations where an interconnect is established. – Mzima

Applicant must use the same peering AS at each US interconnection point and must announce a consistent set of routes at each point, unless otherwise mutually agreed.

– Comcast

Applicant's announcements within Europe must be consistent, i.e. Applicant must announce the same set of routes on all peering sessions – tinet

Applicant's announcements within the US must be consistent –tinet

Each Internet Network will announce consistent customer routes from a single AS at all interconnection points. – LambdaNet

All announcements are to be consistent, in terms of prefix aggregation properties, across all interconnect locations. –OpenAccess

Make consistent route announcements at all public peering points. – Highwinds

Must maintain consistent global routing announcements at all peering locations – Charter

Potential peer must maintain consistent global routing announcements at all interconnections. – CableVision

Candidate must carry full customer routes in Interconnect routers, and announce consistent routes using BGP4 at all peering locations. Interconnection Candidate must use the same peering AS at each U.S. interconnection point. – Qwest

Peer must use the same peering AS at each US interconnection point and must announce a consistent set of routes at each point, unless otherwise mutually agreed.

– AT&T

Domestic Interconnection Requirements – multiple geographic locations

Speakeasy is primarily interested in peering with networks of similar size, where multiple geographically diverse interconnections are possible. – Speakeasy

Interconnection with other networks in a single location is possible under certain circumstances, such as:

* to encourage adoption of newer technologies such as ip multicast, ipv6, or similar

* peering with a network whose primary geographical footprint does not overlap that of Speakeasy's network infrastructure. examples of this could be national networks in Europe or Asia. – Speakeasy

ATDN

Peering capability: Applicant must peer with ATDN in at least four different locations in the US. Applicant must be able to interconnect with ATDN in:

- * DC area (Northern Virginia),
- * Middle of the country (Dallas or Chicago),
- * Bay area (San Jose/San Francisco),
- * New York or Atlanta.

Minimum interconnection speed is OC-12 (622 Mbps). All interconnections should be uniform speed.

For all interconnect types (Public and Private), interconnection must occur at a minimum of two (2) diverse peering points. For US peers, those interconnections must come from at least two (2) different geographic regions: East, Central, and West. Specific exemptions on the number of locations may be made, at Internap's discretion, for networks that operate in regions where Internap does not currently interconnect with other networks. – InterNAP

tw telecom requires Non U.S. based ISPs to build peering sessions in at least 2 diverse regions on the coast where peering is initiated. – TW Telecom

Potential peers must be present in more than one common peering location; RCN will not activate single-region peers.

[...]as long as the peer can meet us at both coasts as a minimum - HopOne

Presence at two or more Public Peering locations listed above (at least one on the West Coast and one on the East Coast or Mid West). – Cox

Presence at two or more Public peering locations listed above for International ISPs. – Cox

Domestic networks must interconnect at a minimum of three physically diverse peering points, one in each of the following regions: West Coast (Los Angeles, San Jose or Seattle); Central (Chicago or Dallas); East Coast (New York, Ashburn, Philadelphia or Miami). – wbsconnect

International networks may connect may interconnect at a single peering point: London, Amsterdam or Hong Kong – wbsconnect

Peers must be able to support sessions in at least 3 different geographic regions or timezones (U.S. domestic networks). – Mzima

Applicant must meet Comcast at a minimum of four mutually agreeable geographically diverse points in the US. Interconnection points must include at least one city on the US east coast, one in the central region, and one on the US west coast, and must currently be chosen from Comcast peering points in the following list of metropolitan areas: New York City/Newark NJ, Ashburn, Atlanta, Miami, Chicago, Denver, Dallas, Los Angeles, Palo Alto/San Jose, and Seattle. – Comcast

All new peerings must be over private links. A minimum of two links interconnecting independent node-sets

is required. Substantial domestic traffic is expected to justify a link. - tinet

Public Peerings shall be established on multiple locations. – LambdaNet

Private Interconnects shall be backed by private or public interconnects in other physical locations. – LambdaNet

Maintain a presence at two or more private peering cities listed above (at lest one on the West Coast, one on the East Coast and preferably on in the Mid West) for domestic ISPs. – NewEdge

Must be present in more than one common Public Peering location listed below (different time zones) – Charter

Interconnect: Interconnect Candidate will have the ability to interconnect with Qwest in a minimum of six geographically diverse Interconnection Points where Qwest has interconnection points of presence. The Interconnection Candidate must have the ability to interconnect directly at GE (1 Gbps) or greater capacity levels at each point of interconnection. – Qwest

Peer must meet AT&T at a minimum of three mutually agreeable geographically diverse points in the US. The US interconnection points must include at least one city on the US east coast, one in the central region, and one on the US west coast, and must currently be chosen from AT&T peering points in the following list of metropolitan areas: New York City/Newark NJ, Washington DC/Ashburn VA, Atlanta (for AS7018 only), Chicago, Dallas, Seattle (for AS7018 only), San Francisco/Palo Alto/San Jose, and Los Angeles. – AT&T

Escalation Path

Both parties shall provide an escalation path for resolving network issues in a timely fashion. Issues of a non-emergency technical nature should be responded to within 48 hours. – InterNap

The Network Operations Center should also have an escalation path to senior level engineers for resolving issues in a timely manner. – NAC

tw telecom peers must agree to actively respond to all technical emergencies as soon as possible. Issues that are not an emergency or performance impacting should be responded to within 2 business days. A history of sub-standard responses may result in de-peering. – TW Telecom

Both parties shall provide an escalation path for resolving network issues in a timely fashion. Issues of a non-emergency technical nature should be responded to within 48 hours. – nLayer

Peers must provide the means by which to escalate and resolve network emergencies. – Mzima

Upon identification of a customer-impacting peering event (outage), technicians will make themselves available for immediate troubleshooting and restoration of the peering session. – Highwinds

Prior to the peering session being established, a copy of Network's escalation procedures and contact information will be exchanged. – Highwinds

Filtering

Peers are expected to filter their clients to reject both unauthorized BGP announcements as well as IP datagrams with invalid source addresses. – Speakeasy

Both parties shall make every reasonable effort to restrict the transmission of Denial of Service attacks and packets with forged source addresses from their network. – InterNap

Potential peering partners must enforce strict filtering policies to prevent route leaks. – NAC

Applicant must filter route announcements from their customers by prefix. – Comcast

Applicant must use prefix-list filters on customer links – tinet

Peers must enforce routing integrity by means of filters to their customers. – LambdaNet

Peers are expected to filter their clients to reject both unauthorized BGP announcements, aggregate prefixes announced as well as filter their prefixes to deny IP datagrams with invalid source addresses.—OpenAccess

Must demonstrate and enforce strict filtering policies to prevent improper announcements – Charter

Potential peer must demonstrate and enforce strict filtering policies to prevent improper announcements. – Cablevision

Both parties must demonstrate and enforce strict filtering policies to prevent route leaks. – WVFiber

Peer must filter route announcements from its customers by prefix. – AT&T

Financially Viable – Comcast

Peer must be financially stable. AT&T

Geographic Scope Requirements

Speakeasy is primarily interested in peering with networks of similar size, where multiple geographically diverse interconnections are possible. - Speakeasy

- 1.1.1 Network Scope: Requester shall have the ability to interconnect with AboveNet in a minimum of three geographically diverse peering locations where AboveNet has a peering point of presence. AboveNet, for Public Peering
- 1.2.1 Network Scope: The Requester must operate an Internet network in either:
- (a) seven cities spanning three time zones in the US,
- (b) two countries in Europe, &/or
- (c) Pacific Rim -- AboveNet for private peering

Geographic Scope. The Requester shall operate facilities capable of terminating IP customer leased line connections onto a device in at least 50% of the geographic region in which the Verizon Business Internet Network with which it desires to interconnect operates such facilities. This currently equates to 25 states in the United States, 9 countries in Europe, or 3 countries in the Asia-Pacific region. The Requester also must have a geographically-dispersed network. In the United States, at a minimum, the Requester must have a backbone node in each of the following eight geographic regions: Northeast; Mid-Atlantic; Southeast; North Central; South Central; Northwest; Mid-Pacific; and Southwest. – Verizon

If Peer's network scope spans a continent and/or multiple continents, then Peer must consider peering at all exchange points that make sense unless otherwise mutually agreed. – Highwinds

Scope of IP Network: Interconnection Candidate will have a national network with IP traffic termination ("IP Pops") in a minimum of 10 major Metropolitan Statistical Areas located in at least three U.S. time zones, which will include the Eastern, Pacific, and Central time zones. – Qwest

In addition a peer of AS7018 must interconnect in two mutual non-US peering locations on distinct continents where peer has a non-trivial backbone network. These non-US peerings will be with AT&T's regional AS only.

Hot Potato Routing/Best Exit/Shortest Path and MEDs

2.4 Hot-potato routing is implied (i.e. we will not send or honor MEDs).—AboveNet

Each Internet Network shall implement "shortest exit routing" and advertise routes consistent with that policy, unless both Internet Networks mutually agree otherwise based on special circumstances. – Verizon

Each Internet Network will implement "hot potato" or "closest-exit routing". - ATDN

All peers will be configured for closest-exit routing unless otherwise expressly agreed. -- RCN

Each Internet Network will implement closest-exit routing, if not otherwise agreed. – LambdaNet

Each Internet Network shall implement "shortest exit/hot potato routing" and advertise routes consistent with that policy, unless both Internet Networks mutually agree otherwise based on special circumstances. – Highwinds

Implement "hot potato" or "closest-exit routing." - Highwinds

Must advertise/implement routes consistent with "shortest exit routing", unless agreed to in writing – Charter

Existing peers whose in: out ratio rises above 2.00:1 will be expected to work with AT&T to implement best-exit routing or to take other suitable actions to balance transport costs. – AT&T

IPv6

Hurricane Electric sets up IPv6 peering (along with IPv4 peering) with all networks that run both protocols. – Hurricane Electric

The criteria involving traffic measurement below applies to IPv4 and IPv6 and must be met by the Applicant for three consecutive months. – Comcast

MD5

2.5 MD5 passwords are required for all BGP sessions. – AboveNet

All BGP sessions will be configured with an MD5 password of at least 15 characters length. – BBC

WBS Connect requires an MD5 password for each BGP session. – wbsconnect

Must use BGP version 4 with BGP authentication keys - Charter

MEDs

tw telecom removes MED information by default. Requests for tw telecom to accept MEDs must be sent to peering@twtelecom.net for review. – TW Telecom

Potential peer must honor metrics attached to routing announcements. – CableVision

Minimum Interconnect Capacity

1.2.3 Minimum Interconnect: Requester shall have the ability to interconnect with AboveNet in a minimum of two geographically diverse peering locations where AboveNet has a peering point of presence. The peering Candidate must have the ability to interconnect directly at a minimum GigE (1000 Mbps) or greater capacity levels at each point of interconnection with a minimum utilization of 25%. – AboveNet, for Private Peering

Each Internet Network must establish and maintain traffic exchange links of a sufficient robustness, aggregate capacity, and geographic dispersion to facilitate mutually acceptable performance across the interconnect links. – Verizon

Each interconnection shall have no less than 1 Gbps of capacity. – InterNAP

Private Interconnects shall be done on one of the following interface types: GbE, 10GbE, STM-4, STM-16. – LambdaNet

Interconnection bandwidth for private peers must be at least 1 Gbps at each US interconnection point. – AT&T

Minimum # of Customer Routes and ASes

1.1.3 Minimum # of routes: Peering Candidate must carry minimum of 250 unique routes in Interconnect routers, and announce consistent routes using BGP4 at all peering locations. – AboveNet Public Peering

Transit Autonomous Systems. The Requestor shall provide transit services to a minimum number of Internet Networks (Autonomous Systems) as follows: 1500 unique transit networks for interconnection with Verizon Business-US; 100 unique transit networks for interconnection with Verizon Business-Europe; and 10 unique transit networks for interconnection with Verizon Business-ASPAC. – Verizon

Transit Autonomous Systems: Interconnection Candidate will provide transit services to at least 500 unique IP Networks/Autonomous Systems. – Qwest

Monitor and upgrade Interconnect

2.7. Each Network shall monitor the usage of all interconnection links. If the utilization of any single link should exceed 90% for a period of at least one hour for three consecutive days, the Networks shall work together to increase capacity or to reroute traffic in order to reduce utilization. – AboveNet

Both parties shall work quickly and diligently to establish additional capacity to accommodate traffic growth. – nLayer

Applicant must agree to participate in joint capacity reviews at pre-set intervals and work towards timely augments as identified. - Comcast

Must be willing to upgrade interconnection capacity within 90 days when peak usage, for a time period greater than 10 business days, has surpassed 70% of a circuit's port capacity as well as participate in joint capacity reviews at pre-set intervals – Charter

Potential peer must be willing to upgrade interconnection capacity within 90 days when peak usage has consistently, for a time period greater than 10 business days, surpassed 60% of any provisioned circuit's usable capacity. –Cablevision

Existing peers of AS7018 and AS7132 will have their peering status reviewed periodically to ensure joint capacity planning and to ensure that all criteria continue to be met. AT&T

NDA Required

The two Internet Networks must enter into a Mutual Non-Disclosure Agreement and an Interconnection Agreement. – Verizon

The applicant must execute an AOL Non-Disclosure Agreement (NDA). – ATDN

Potential peers must be willing to enter into agreements with RCN, though no execution of agreements is presently required for public peering. Private peering with RCN requires the execution of a Bilateral Peering Agreement (BLPA). The transmission of a BLPA requires a non-disclosure agreement (NDA) be in place between the respective parties. All discussions regarding private peering are under NDA. -- RCN

Willingness to enter into a Bilateral Interconnection Agreement and Non-Disclosure Agreement with Cox Communications. – Cox

Applicant should be willing to enter into an NDA before formal discussions begin. – Comcast

Upon request Peer shall execute a LambdaNet Non-Disclosure Agreement (NDA). – LambdaNet

Enter into a standard peering agreement and mutual non-disclosure agreement with New Edge Networks as requested. -- NewEdge

Must enter into a NDA & Bilateral Interconnection Agreement and assume financial and provisioning responsibility for cross connects on an alternating/bilateral basis – Charter

Potential peer must be willing to enter into a Non-Disclosure Agreement. – Cablevision

No Pointing Default

Peers must not utilize any form of gateway of last resort or default route that is directed at Speakeasy. – SpeakEasy

Only send us traffic that destined for the prefixes we announce to you. Do not point default at us or use static routes to send us traffic that does not match the routes we announce to you. – Hurricane Electric

2.6. Neither Network shall point default into or transit the other Network where that network has not advertised a route for the destination in question. – AboveNet

Each Internet Network must set next hop to be itself, the advertising router of the network. Each Internet Network will propagate such routes to its transit customers with its own router as next hop. – Verizon

Each Internet Network will restrict its advertisements to non-transit routes originating within the geographic region for which peering is established and will not propagate the received route announcements outside such region. – Verizon – note, more like keeping announcements in region

No route of last resort will be (default route) directed at ATDN. - ATDN

Both parties shall announce only their own routes and the routes of their transit customers to the other party. No other routes are permitted, and may be filtered if detected. – InterNap

Neither party shall abuse the peering relationship in any way. Neither party shall establish a static route, a route of last resort, or otherwise send traffic to the other party for a route not announced via BGP. Neither party shall alter, sell, or give next-hops to a third party. Neither party shall use the other party's network for transit, or engage in any other routing manipulation that causes the other party's network to provide transit to peers. This would include, but is not limited to, establishing a tunnel between two different peering interconnection points, or announcing to the other the more specific routes of prefixes learned via a third party mutual transit customer. – InterNap

Neither party shall point default "route of last resort"; add a static route; or otherwise send traffic to the other party for a route not advertised via BGP. – NAC

tw telecom Peers must not abuse the peering relationship. For example, pointing a default, resetting next hop, selling or giving next hop to others, improper filtering, and leaking routes originating outside the peer's network. – TW Telecom

Neither party shall establish a static route, a route of last resort, or otherwise send traffic to the other party for a route not announced via BGP. – nLayer

All peers must not abuse the peering relationship by doing any of the following non-exhaustive list:

- pointing default
- resetting next hop
- selling, bartering, trading or giving either routes or next hop to third parties (non-customers)
- leaking routes to third parties (non-customers)
- sending inconsistent prefixes (in number, origin, or other attributes) without prior agreement –RCN

Both parties shall refrain from using one another as a route of last resort, or otherwise sending traffic to the other party for a route not announced via BGP. – wbsconnect

Neither party shall abuse the SFI network peering relationship by engaging in activities such as, but not limited to: pointing a default route at the other or otherwise forwarding traffic for destinations not explicitly advertised, resetting next-hop, selling or giving next-hop to others. – Comcast

- # No route of last resort (default route) will be directed at LambdaNet. LambdaNet
- # Peers must not utilize any form of gateway of last resort or default route that is directed at OpenAccess. OpenAccess
- # Not direct a route of last resort (default route) at New Edge Networks. NewEdge

Must not implement a "gateway of last resort" or default route directed at AS20115 – Charter

Interconnection Candidate must not establish a route of last resort (i.e., default route) directed toward Owest. – Owest

No selling or giving away next Hop

Neither party shall modify, sell, or provide the next-hop to a third party. - NAC

The Peer shall announce only its own customer routes to tw telecom. – TW Telecom

tw telecom Peers must not abuse the peering relationship. For example, pointing a default, resetting next hop, selling or giving next hop to others, improper filtering, and leaking routes originating outside the peer's network. – TW Telecom

Both parties shall announce only their own routes and the routes of their transit customers to the other party. No other routes are permitted, and may be filtered if detected. – nLayer

Neither party shall alter, sell, or give next-hops to a third party. These activities are considered theft of service, and will be prosecuted to the fullest extent of the law. – nLayer

Neither party shall announce to the other the more specific routes of prefixes learned via a third party transit customer. – nLayer

Both parties shall announce only their own routes and the those of their transit customers to one another. Route leaking is prohibited, and will be filtered if detected. – wbsconnect

No transit or third party routes are to be announced; all routes exchanged must be Applicant's and Applicant's customers' routes. – Comcast

Applicant shall not be permitted to offer or sell any IP transit services providing only AS7922. – Comcast

Applicant must use the peering connection for all Traffic destined towards the TISCALI network – tinet

Applicant must not sell or give next-hop to any 3rd party (i.e. peer must not readvertise Tinet routes to any peer) – tinet

Neither party shall modify, sell or provide the next-hop to a third party. – OpenAccess

Each Internet Network will restrict its advertisements to non-transit routes originating within the geographic region for which peering is established and will not propagate the received route announcements outside such region. – Note – more about keeping routes within region

1.12. Each Internet Network must set next-hop to be itself, the advertising router of the network. Each Internet Network will propagate such routes to its transit customers with its own router as next-hop. – Highwinds

Must advertise routes, including customer routes, but eliminate all transit or third party routes – Charter

Must not abuse the peering relationship by doing any of the following:

- a. Resetting next hop
- b. Reselling, bartering, trading or giving either routes or next hop to third parties (non-customers)
- c. Leaking routes to third parties (non-customers)
- d. Sending inconsistent prefixes (in number, origin, or other attributes) unless agreed to in writing Charter

Must agree not to offer or sell any IP transit service providing only AS20115 – Charter

The Interconnection Candidate may not advertise third party routes that allow direct traffic exchange (in either direction) between Qwest and customers of the Interconnection Candidate. – Qwest

Both parties shall announce only their own routes and the routes of their transit customers to the other party. No other routes are permitted, and may be filtered if detected. – WVFiber

Neither party shall establish a static route, a route of last resort, or otherwise send traffic to the other party for a route not announced via BGP. Neither party shall alter, sell, or give next-hop to a third party. These activities are considered theft of service, and will be prosecuted to the fullest extent of the law. – WVFiber

Neither party shall announce to the other a more specific route of a prefix heard from a third party transit customer. – WVFiber

No transit or third party routes are to be announced; all routes exchanged must be peer's and peer's customers' routes. – AT&T

Neither party shall abuse the peering relationship by engaging in activities such as but not limited to: pointing a default route at the other or otherwise forwarding traffic for destinations not explicitly advertised, resetting next-hop, selling or giving next-hop to others. – AT&T

Notification/Interaction Requirements

2.8. Each Network shall be responsible for communicating with its customers with respect to its Internet Network and the services, including Internet connectivity, each provides to its respective customers. – AboveNet

- 2.9 Interconnection Candidate must provide 48 hours notice to AboveNet NOC for scheduled maintenance. Said maintenance windows to be between 02:00hrs and 05:00hrs of local time. -- AboveNet
- 2.10 Joint quarterly capacity planning reviews for interconnection augmentation to accommodate traffic growth and minimize the possibility of latency or packet loss between both networks. AboveNet
- 2.11 Peers who are unable to maintain the minimums listed in sections 1 & 2 will be given 30 days written notice to remedy the situation. AboveNet

The applicant must provide AOL with a readable hard or soft copy network map. This map must show network topology details and active IP capacity between backbone nodes. – ATDN

Both parties shall make every reasonable effort to provide advance notice of any planned maintenance, and immediate notice of any unplanned outages, affecting any interconnection. – InterNAP

A good faith effort should be made to facilitate communication regarding network maintenance that will affect traffic exchange. – NAC

All peers are expected

to communicate contact updates in a timely manner. All peers are expected to proactively send updates regarding maintenance activities, outages, and other significant activities. All peers will be notified likewise by RCN. – RCN

Both parties shall provide advance notice of any planned maintenance, and immediate notice of any unplanned outages, affecting any interconnection. – wbsconnect

Upon request Peer shall provide LambdaNet with a readable hard or soft copy network map. This map shall show network topology details and active IP capacity between backbone nodes. – LambdaNet

Any outage or impairment to peering session which is identified by the remote network operator is to be reported to the HWNG NOC as soon as it is identified. – Highwinds

A good faith effort should be made to communicate information regarding network maintenance that will affect traffic exchange. – OpenAccess

Must register routes or send advance notice of dramatic changes in announcements – Charter

Potential peer must notify Cablevision in advance of any peering or technical contact changes. – CableVision

Potential peer must be willing to supply network information upon request. – Cablevision

Interconnection Candidate must provide 48 hours notice to Qwest NOC for scheduled maintenance. – Qwest

Interconnection Candidate must provide trouble reporting and escalation procedures to Qwest. Qwest must have the ability to open tickets with Interconnection Candidate. – Qwest

Both parties should make a good faith effort to facilitate communication regarding network maintenance that will affect traffic exchange. – WVFiber

Paid Peering Available

If these requirements are not met, then a Paid-Peering arrangement can be made. – Cox

Networks that do not meet the requirements of the settlement-free interconnection policy, but remain interested in Comcast dedicated internet access services may also address their requests to peering@comcast.com. In this case the subject line of the e-mail should indicate a need for sales assistance. The body of the message should include as many details as possible, such as location and telephone number, to expedite the redirect for assistance. – Comcast

Applicants not matching this policy may apply for a Paid Peering. – tinet

Networks that do not meet the requirements of the applicable peering policy but that are interested in AT&T dedicated internet access services may also address their requests to peering@att.com. In this case the subject line of the e-mail should indicate a need for sales assistance. The body of the message should include as many details as possible, such as location and telephone number, to expedite the redirect for assistance.

Peering Agreement May Change

This policy may be updated from time to time, and Internap reserves the right to modify, replace, or nullify this policy at any time. – InterNap

Net Access Corporation reserves the right to modify, replace, or nullify this document at any time. – NAC

This policy may be updated from time to time, as market and traffic conditions affecting network interconnections change. nLayer reserves the right to modify this policy at any time. – nLayer

RCN reserves the right to change this peering policy without notice. -- RCN

WBS Connect reserves the right to modify this policy at any time, for any reason. – wbsconnect

Comcast may modify this SFI policy at any time. -- Comcast

HWNG will continue to monitor the development of the Internet and traffic conditions and make appropriate changes in this Policy as the Internet continues to evolve. HWNG reserves the right to modify this Policy at any time. – Highwinds

Charter Communications reserves the right to change this peering policy without notice. – Charter

Qwest maintains the right to change this policy at any time without written notification. It is the responsibility of Interconnection Candidate to maintain compliance with the policy. The policy is located at www.Qwest.com/legal. -- Qwest

This policy may be updated from time to time, as market and traffic conditions affecting network interconnections change. We reserve the right to modify, replace, or nullify this document at any time. -- WVFiber

Periodic review of the policies contained here will be conducted to ensure that the criteria and eligibility requirements are consistent with AT&T's business needs. AT&T may modify this settlement-free peering policy at any time. – AT&T

Peering at all points in common

Hurricane Electric expects you to peer at all exchange fabrics we have in common if we peer with you via public exchanges or all facilities we have in common if we peer via private interconnect with you. In other words, if are peering in the US, Asia and Europe at the same locations as Hurricane you must peer with Hurricane at all those locations. This is prevent problems for your and our US and European customers so that customer traffic does not cross the Pacific or Atlantic twice to return back to the same continent. – Hurrican Electric

tw telecom requires U.S. based ISPs to build peering sessions in as many locations as possible (California, Seattle, Chicago, Dallas, Atlanta, Ashburn, NY). – tw telecom

To ensure optimal QoS and redundancy, peers are requested to peer with us at all common peering points. – HopOne

Applicant agrees to peer in all markets where Peer and Tinet share a presence – tinet

Peering Requests

3.4. All requests for settlement-free peering must be submitted via e-mail to peering@above.net. The e-mail should include:

- * the Requester's complete contact information (name, phone, email)
- * the Requester's ASN
- * a list of suggested interconnection points
- * a traceroute showing the current path taken to www.above.net
- * an IP address AboveNet can traceroute to for testing purposes
- -- AboveNet

All requests for settlement-free interconnection should be submitted to Verizon Business via e-mail at peering@verizonbusiness.com. An Internet Network may submit a request for interconnection once per calendar quarter. – Verizon

An applicant may submit a request for interconnection once every six months. If the applicant has participated in a traffic evaluation trial, the six month window starts after the end of the trial. – ATDN

Please send all questions/inquiries about peering to peering@atdn.net. -- ATDN

To request peering with tw telecom, please send email to peering@twtelecom.net -- TW Telecom

DALnet maintains an open peering policy. To request peering, please send the request to peering@dal.net. -- dalnet

To apply for IPv4 or IPv6 settlement-free interconnection with Comcast an email must be sent to peering@comcast.com containing evidence of meeting all criteria listed in the policy. – Comcast

Applicants may apply for settlement-free interconnection once every six (6) months. – Comcast

All peering requests shall be sent by email to peering@tinet.net. -- tinet

Peering requests shall not be sent more than once in 3 months. – tinet

A network may submit a peering request once every three months. - LambdaNet

Please send all questions/inquiries about peering in English to:

peering@lambdanet.net -- LambdaNet

All requests for settlement-free interconnection should be submitted to HWNG via e-mail at peering@hwng.net. -- Highwinds

Peering Requests should be sent to: peering@newedgenetworks.com -- NewEdge

To request a Peering arrangement with Charter Communications, please send an email request including a network map, proposal of mutual points of interconnect and anticipated volumes to peering@charter.com --Charter

Send peering inquiries to peering@qwest.com. -- Qwest

Applicants may apply for settlement-free peering once every six (6) months. – WVFiber

An ISP seeking peering with any of these ASNs should submit its request in writing, providing a description of its network including such information as: 1) whether it has a single-country or regional network; 2) if regional, which countries are served; 3) in which exchange points the ISP has a presence; 4) a list of autonomous system numbers and prefixes served; and 5) a description of the type of traffic carried by the network. Applications for peering in Canada should be submitted to peering@att.com; applications for Europe, Latin America, and Asia-Pacific should be submitted to peering@attglobal.net. AT&T

Internet backbone providers wishing to initiate discussions with either AS7018 or AS7132 regarding potential establishment of new settlement-free peering in the US should contact peering@att.com with their requests, including evidence of meeting all criteria listed in the US policy below. The criteria involving traffic measurements must be met by a prospective peer for three consecutive months. Potential peers will be contacted within a reasonable timeframe to discuss their requests. --AT&T

To apply for IPv4 or IPv6 settlement-free interconnection with Comcast an email must be sent to peering@comcast.com containing evidence of meeting all criteria listed in the policy. Applicants will be responded to within a reasonable timeframe to discuss their request. – Comcast

Peering Trial

3.3 AboveNet may require a trial peering connection spanning a minimum of one month with the perspective candidate to measure accurately the traffic ratios between the candidate and AboveNet. A successful trial does not guarantee that AboveNet will peer with this candidate.

For the purposes of Requirements 1.2 and 1.4 of the Policy, all traffic is to be measured over interconnection links. In the event that such links do not exist, the two Internet Networks may establish temporary test links for the purposes of traffic measurement. In the event that establishing such links is not feasible or desirable, traffic will be measured at peak utilization, based upon a representative sample consistent with industry practice. – Verizon

The cost of setting up temporary connections for traffic evaluation will be borne by the applicant. – ATDN

Applicant should be advised that the SFI processes will start with a 90 day trial. On successful completion of that trial, a formal interconnect agreement will be processed. This agreement will renew annually, subject to the then current SFI Policy. During the year if there is a violation of the policy, the agreement and interconnections may be terminated upon written notice to the contacts specified in the agreement. – Comcast

LambdaNet reserves the right to set up public peerings on a test basis. – LambdaNet

Must successfully complete a 90 day trial and then enter into a formal Peering agreement – Charter

In an attempt to measure accurately the traffic ratios between Qwest and Interconnection Candidate, Qwest may require a trial peering connection with Interconnection Candidate. Such a trial will only occur pursuant to a Peering Trial Agreement. Although Qwest only considers private peering initiatives, Qwest may agree to enter into a public interconnection relationship as part of the trial connection. In no case will a public peering connection continue beyond an initial trial. A successful peering trial does not guarantee that Qwest will agree to peer with Interconnection Candidate. – Owest

PeeringDB

Hurricane Electric sets up IPv6 peering (along with IPv4 peering) with all networks that run both protocols. – Hurricane Electric

Applicants must be listed and provide updated contact information (if applicable) on PeeringDB.com. – WVFiber

Prefix Length

AboveNet will not permit the routes longer than a /24 from its peers. – AboveNet

Routes should be aggregated as much as possible. ATDN will not accept any announcement smaller than /24. – ATDN

Applicant announces a minimum of 1,000 fully aggregated routes or equivalent of 50,000 Class-C networks – tinet

Applicant's network must share a presence with Tinet in at least four regions in Europe and two regions in the US, out of the regions below. These regions must be linked with redundant dedicated IP backbone capacity of OC192 or higher. Applicants are expected to have a significant customer base in any of theregions and thus carry significant domestic traffic in these regions to match this criterion. – tinet

Routes should be aggregated as much as possible. LambdaNet will not accept any announcement smaller than /24. – LambdaNet

Aggregate routes as much as possible: New Edge Networks will not accept any announcement smaller than /24 – NewEdge

Must provide only IPv4 route advertisements and will not provide route advertisements more specific than a /24 – Charter

Reciprocally Peer in Home Markets

Comcast requires that Applicants seeking SFI in the United States agree to provide reciprocal SFI arrangement with Comcast in the Applicant's home market.

We require that Applicants seeking settlement-free peering in the United States agree to provide reciprocal settlement-free peering with AS19151 in the Applicant's home market. – WVFiber

Redundancy

2.2. Each Network must operate a network with sufficient redundancy and capacity that the failure of a single node will not significantly affect performance. – AboveNet

Each Internet Network must operate a fully redundant network, capable of handling a simultaneous single-node outage in each network without significantly affecting the performance of the traffic being exchanged. – Verizon

Applicant must operate a fully redundant network capable of handling a single-node outage in each network without significantly affecting the traffic being exchanged. – ATDN

Both parties shall maintain a fully redundant backbone network, in which the majority of the inter-hub circuits shall have a dedicated capacity of at least 10Gbps (OC-192/STM-64 or equivalent). Burstable circuits circuits delivered over MPLS, ATM, or similar technology, must have a dedicated (not burstable) point-to-point capacity of at least 10Gbps on each circuit to qualify. – nLayer

Peer must operate a fully redundant network capable of handling a single-node outage in each network without significantly affecting the traffic being exchanged. – LambdaNet

Requirements met and Continue to be Met

The requirements in Part 1 must be met at the time the request for settlement-free interconnection with Verizon Business is made. – Verizon

All requirements of the Policy must continue to be met to continue a settlement-free interconnection relationship. Status under the policy will be evaluated periodically. In the case of a change in ownership or control of an Internet Network with which Verizon Business has an interconnection agreement, status under the policy will be evaluated within 30 days of such change. – Verizon

Verizon Business will continue to monitor the development of the Internet and traffic conditions and make appropriate changes in this Policy as the Internet continues to evolve. Verizon Business reserves the right to modify this Policy at any time. Any contractual rights shall arise out of a bilateral interconnection agreement, not this Policy. – Verizon

To ensure continued compliance with the SFI policy, status of all settlement-free peers will be reviewed once every six months. Peers who do not comply with published SFI policy will be given 30 days written notice to remedy the situation. – ATDN

All requirements must be met at the time the request for Peering is made, and must continue to be met for the duration of the interconnection. – nLayer

Applicant must agree to participate in joint capacity reviews at pre-set intervals and work towards timely augments as identified. – Comcast

All requirements of the Policy must continue to be met to continue a settlement-free interconnection relationship. Status under the policy will be evaluated periodically. In the case of a change in ownership or control of an Internet Network with which

HWNG has an interconnection agreement, status under the Policy will be evaluated within 30 days of such change. – Highwinds

Engage with New Edge Networks in joint capacity planning reviews for interconnection augmentation to accommodate traffic growth and minimize the possibility of latency or packet loss between both networks. – New Edge

All requirements must be met at the time the request for Peering is made, and must continue to be met for the duration of the interconnection. – WVFiber

Scale Requirements / Network Capacity

1.2.2 Network Capacity: The Requester must have a backbone with a minimum two OC-48's between any two backbone cities. – AboveNet, for Private Peering

Backbone Capacity. The Requester shall have a fully redundant backbone network, in which the majority of its inter-hub trunking links shall have a capacity of at least 9953 Mbps (OC-192) for interconnection with Verizon Business-US, 2488 Mbps (STM-16) for interconnection with Verizon Business-Europe, and 622 Mbps (OC-12) for interconnection with Verizon Business-ASPAC. – Verizon

Backbone capacity: OC-192/10 Gbps or greater active bandwidth between eight (8) or more geographically dispersed cities. Only one (1) city in each state can be counted to qualify for the eight city requirement. – ATDN

Both parties shall maintain a redundant backbone network with sufficient capacity to minimize queueing and ensure delivery of traffic both during normal and single-failure scenarios. Both parties shall act quickly and diligently to establish additional capacity to proactively accommodate traffic growth. – InterNAP

Both parties shall have sufficient capacity into the exchange switch to pass all traffic sent and received without queueing or loss. Both parties shall work proactively and diligently to establish additional capacity to accommodate traffic growth. – InterNAP

For domestic ISPs coast-to-coast nationwide OC-12 or larger backbone. - Cox

- # Both parties shall maintain a minumum OC-192/10GE backbone network with adequate capacity to ensure delivery of traffic within normal SLA standards. wbsconnect
- # Both parties shall maintain enough capacity on public peering ports to ensure delivery of traffic within normal SLA standards. wbsconnect
- # Peers must provide sufficient capacity to handle traffic exchanged whether by public exchange or private interconnect. Mzima

Applicant must operate a US-wide IP backbone whose links are primarily 10 Gbps or greater. – Comcast

Each Internet Network must establish and maintain traffic exchange links of a sufficient robustness, aggregate capacity and geographic dispersion to facilitate mutually acceptable performance across the interconnect links. – Highwinds

Must be able to transport capacity greater than, the interconnecting port speed – Charter

Potential peer must possess backhaul capacity equal to, or greater than, the interconnection circuit. – Cablevision

Network Capacity Requirements: Interconnection Candidate will have 10GE/OC192 pop to pop trunking speeds, i.e., a 10GE/OC192 backbone. – Qwest

Both parties shall maintain sufficient backbone and interconnection capacity to enable saturation free delivery of the traffic being exchanged. Both parties should act proactively to establish additional capacity to accommodate traffic growth. – WVFiber

Interconnection at a minimum of three (3) diverse peering cities (one east-coast, one midwest, one west-coast). WVFiber, NorthAmerica Interconnection at one (1) or more peering points in common. WVFiber Europe Interconnection at two (2) geographically diverse continents (North America and Europe). WVFiber Global

Private interconnection at a minimum of three (3) geographically diverse private peering cities (one east-coast, one midwest, one west-coast). For US Private interconnection at one (1) private peering city. For Europe

A peer of AS7018 must operate a US-wide IP backbone whose links are primarily OC192 (10 Gbps) or greater. For AS7132, the peer's US-wide IP backbone links must be predominantly OC48 (2.5 Gbps) or greater. –AT&T

Single AS

Applicant must operate the network as a single Autonomous Number (ASN) for its global backbone network. If the Applicants Internet Network uses multiple ASNs, then as solely determined by AOL, both networks will exchange routes equivalent to the Internet Network's footprint in those regions. – ATDN

There will be only one peering relationship per corporate (i.e. only one peering relationship -with a single

AS - for corporate companies) – tinet

Must use the same ASN at each peering interconnect – Charter

Suspension/Termination/Exceptions

Speakeasy reserves the right to suspend peering for an indefinite period of time should any form of network abuse be verified to take place via the peering interconnect. The following non-exhaustive list serves to provide examples of such abuse:

- * Denial of Service attacks
- * Unsolicited Bulk Email sources
- * Setting default-route to Speakeasy

Speakeasy's final decision in peering is based upon a mutually agreeable decision to peer based upon operational needs. If Speakeasy's operational needs cause a peering arrangement to conflict with the best interest of Speakeasy, Speakeasy reserves the right to terminate the peering agreement with reasonable advance notice. -- Speakeasy

Other factors may also be evaluated, and will be addressed on a case by case basis. – Speakeasy

- 3.2. The requirements set forth in Section 1 of this policy must be met at the time the request for settlement-free peering with AboveNet is made. All requirements in this Policy must continue be met in order for the Requester to remain eligible for peering. AboveNet
- 3.5. Abovenet reserves the right to grant or refuse peering to a requestor, whether or not they would otherwise meet these requirements. AboveNet

The SFI Policy is only a guideline. Meeting all of the requirements stated in the SFI Policy does not guarantee AOL will enter a SFI relationship with applicant. AOL reserves the right to not grant settlement-free peering to an applicant based on business reasons. – ATDN

Any exceptions to this SFI Policy will be granted at the sole discretion of AOL. – ATDN

Any interconnection may be temporarily suspended or disconnected at the sole discretion of either party. – InterNap

Any interconnection may be terminated for any reason, with 30 days notice to the other party. -- InterNap

Internap reserves the right to accept or decline any interconnection request for any reason. – InterNap

Any interconnection may be terminated for any reason, with 30 days notice. -- NAC

Meeting all of the requirements stated in the Policy does not guarantee NAC will enter a settlement-free interconnection relationship with applicant. Net Access reserves the right to deny settlement-free peering to an applicant based on business reasons. NAC also reserves the right to make exceptions to this policy for special case or legacy peering partners. – NAC

tw telecom reserves the right to decline and terminate peering with anyone that does not meet this Peering Policy. – TW Telecom

In the event of a severe or quality-of-service impacting violation of these policies, the interconnection may be temporarily suspended without notice. – nLayer

Any interconnection may be terminated for any reason, with 30 days notice. – nLayer

nLayer reserves the right to accept or decline any interconnection request for any reason. – nLayer

RCN reserves the right to peer or not with any network as we see fit, for any reason, without requirement of disclosure. – RCN

RCN reserves the right to terminate public peering at any time with 30 days' notice. Such advanced notice is neither guaranteed nor required for unresponsive, abusive, or negligent peers.

Meeting the private or public guidelines above with Cox Communications is not a guarantee that peering will be established. Cox Communications reserves the right to not grant peering to an applicant based on business reasons. – Cox

Any settlement-free peering agreement may be terminated for any reason with 30 days written notice to the other party. – wbsconnect

WBS Connect reserves the right to decline any settlement-free peering request at any time, for any reason. – wbsconnect

Meeting the SFI network peering guidelines set forth herein is not a guarantee that an SFI network peering relationship with Comcast will be established. Comcast shall evaluate a number of business factors and reserves the right not to enter into a SFI network peering agreement with an otherwise qualified applicant. – Comcast

Existing SFI network peers of Comcast will have their status reviewed periodically to ensure that joint capacity planning intervals are sufficient for growth, contacts are refreshed for operations purposes, and all criteria continue to be met. – Comcast

Comcast reserves the right to terminate SFI network peering, upon a notice period as determined by the parties' agreement, with peers who do not meet the criteria described above.

Periodic review of the policies contained here will be conducted to ensure that the criteria and eligibility requirements are consistent with Comcast's business needs. – Comcast

Tinet reserves the right to terminate the peering at any time with 30 days notice – tinet

This policy is a guideline. Meeting all the requirements stated in here does not guarantee that Tinet will enter into a settlement-free relationship with the applicant. Tinet reserves the right not to grant settlement-free peering to an applicant based on business reasons. – tinet

Tinet may honor legacy peers not entirely matching requirements outlined in here at it's sole discretion – tinet

Any exceptions to this policy will be granted at the sole discretion of Tinet. – tinet

LambdaNet reserves the right to apply the criteria set forth in this document to all existing peering relationships at any time. -- LambdaNet

Final qualification for Peering is determined through business analysis. Apart from the criteria below - the cost/benefit analysis must show the Peering as being beneficial for all LambdaNet organisations. – LambdaNet

Meeting the requirements of this document does not require OpenAccess to establish a peering relationship. – Open Access

OpenAccess reserves the right to suspend peering for an indefinite period of time should any form of network abuse be verified to take place via the peering interconnect. – OpenAccess

- # Recurring incidents of network abuse and/or slow responses on curing an incident will result in termination of the peering relationship. --OpenAccess
- # OpenAccess reserves the right to terminate the peering relation for any reason with 30 days notice. -- OpenAccess

Compliance with the technical and operational requirements in the Policy does not guarantee a peering relationship with HWNG. -- HighWinds

Meeting the guidelines is not a guarantee that peering will be established. Charter Communications reserves the right to refuse peering to the applicant based on business reasons, without requirement of disclosure. Charter Communications will not peer with any network that has been an IP transit customer within the past six

(6) months. Charter Communications reserves the right to terminate public peering at any time with 30 days' notice. Such advanced notice is neither guaranteed nor required for unresponsive, abusive, or negligent peers. – Charter

Compliance with the technical and operational requirements in the policy does not guarantee a peering relationship with Qwest.

The peering policy is only a guideline. Meeting or exceeding all of the above requirements does not guarantee Qwest will enter into a peering relationship with Interconnection Candidate. -- Qwest

Peering will only occur if Qwest and Interconnection Candidate reach agreement on the terms of a Peering Agreement. -- Qwest

In the event of a severe, criminal, or quality-of-service impacting violation of these policies, the interconnection may be temporarily suspended without notice. – WVFiber

Any interconnection may be terminated for any reason, with 30 days notice. – WVFiber

Meeting all of the requirements stated in the Policy does not guarantee we will enter a settlement-free interconnection relationship with Applicant. We reserve the right to deny settlement-free peering to an Applicant based on business reasons. We also reserve the right to make exceptions to this policy for special case or legacy peering partners. – WVFiber

Meeting the peering guidelines set forth herein is not a guarantee that a peering relationship with AT&T will be established. AT&T shall evaluate a number of business factors and reserves the right not to enter into a peering agreement with an otherwise qualified applicant. – AT&T

AT&T reserves the right to terminate peering, upon a notice period as determined by the parties' agreement, with peers who do not meet the criteria described above. AT&T

Tools

Peers should provide access to a looking glass or traceroute server to facilitate troubleshooting. – Speakeasy

The two Internet Networks must exchange with each other prior to any settlementfree interconnection agreement a free shell or PPP account for testing and auditing purposes related to routing. This will be used for confirmation of traffic flows, troubleshooting of interconnection-related issues, and auditing purposes. – Verizon

Both parties shall provide access to a route server, looking glass, or similar service for the purposes of routing audits, diagnostics, and troubleshooting. – nLayer

All peers are requested to enable LSRR on router interfaces facing RCN peering sessions to facilitate network diagnostics at least during session activation. -- RCN

Peers should provide a looking glass and/or traceroute server at each interconnection point to assist in troubleshooting. – OpenAccess

Interconnection Candidate must maintain a publicly accessible looking glass server with BGP views and traceroute capabilities from 5 cities spread across 3 U.S. time zones. – Qwest

Both parties shall provide access to a route server, looking glass, or similar service for the purposes of routing audits, diagnostics, and troubleshooting. – WVFiber

Traffic Ratios

2.3 The ratio of the aggregate amount of traffic exchanged between the Requester and the AboveNet with which it seeks to interconnect shall be roughly balanced and shall not exceed bidirectional ratio of 2:1. – AboveNet

Traffic Exchange Ratio. The ratio of the aggregate amount of traffic exchanged between the Requester and the Verizon Business Internet Network with which it seeks to interconnect shall be roughly balanced and shall not exceed 1.8:1. – Verizon

The traffic ratio should be reasonably balanced and no more than 2:1. – ATDN

Applicant must maintain a traffic scale between its network and Comcast that enables a general balance of inbound versus outbound traffic. The network cost burden for carrying traffic between networks shall be similar to justify SFI. – Comcast

Applicant must meet a minimum traffic ratio of 1:3 – tinet

Potential peer must not exceed a usage ratio of 3:1, in either direction for a period greater than 30 days, unless otherwise expressed and agreed to in writing. – CableVision

Traffic Ratios: Interconnect Candidate will have a 1.5:1 aggregate traffic ratio with 5 Gbps sustained bi-directional traffic flows, measured at 95% peak. The traffic must be balanced across three time zones. The Interconnection Candidate must provide

24-hour peak and average traffic volume statistics at each Interconnection Point. The quantity and speed of circuits between Qwest and Interconnection Candidate will be determined by overall traffic between the two parties, and will be reviewed periodically. – Qwest

Peer must maintain a balanced traffic ratio between its network and AT&T. In particular, a new peer must have:

- * No more than a 2.00:1 ratio of traffic into AT&T: out of AT&T, on average each month.
- * A reasonably low peak-to-average ratio.
- -- AT&T

Traffic Volume Requirements

1.1.2 Minimum utilization: The peering Candidate must have a minimum aggregate of 50 Mbps and a maximum of 200 Mbps on any single peering exchange. – AboveNet, Public Peering

Traffic Volume. The aggregate amount of traffic exchanged in each direction over all interconnection links between the Requester and the Verizon Business Internet Network with which it desires to interconnect shall equal or exceed 1500 Mbps of traffic for Verizon Business-US, 150 Mbps of traffic for Verizon Business-Europe, and 30 Mbps of traffic for Verizon Business-ASPAC. – Verizon

For the purposes of Requirements 1.2 and 1.4 of the Policy, the traffic to be measured will include only what is being exchanged by the two Internet Networks and their respective customers (excluding any transit traffic) in the specific geographic region for which settlement-free interconnection has been requested. – Verizon

Traffic requirements: The AVERAGE traffic volume exchanged between ATDN and Applicant must be 972 Mbps or higher in each direction (inbound and outbound). – ATDN

At least 5 Mbps of aggregate traffic, measured using 95th Percentile in either direction, must be exchanged on an ongoing basis. Specific exemptions on traffic levels may be made, at Internap's discretion. – InterNAP for Public Peering

At least 50 Mbps of aggregate traffic, measured using 95th Percentile in either direction, must be exchanged on an ongoing basis. Specific exemptions on traffic levels may be made, at Internap's discretion. – InterNap

Aggregate traffic over the peering sessions should have a combined measurement (Ingress + Egress @ 95th percentile) of at least 350M for Public Peering. – TW Telecom

Aggregate traffic over the peering sessions should have a combined measurement (Ingress + Egress @ 95th percentile) of at least 500M for Private Peering. – TW Telecom

[Will not peer if...] Existing traffic levels are below 1Mbps peak – EasyNet

[Will normally peer if Existing traffic levels are at 100Mbps or more – EasyNet

For private peering, a minimum of 20 Mb/s average or 40 Mb/s 95th percentile sustained traffic over the three (3) immediately preceding months is required to have been exchanged between the two potential peer networks. For public peering, there are no traffic requirements. – HopOne

A minimum Internet traffic exchange of 10Mbps (95th percentile) with Autonomous system 22773. – Cox for Public Peering

A minimum Internet traffic exchange of 100Mbps (95th percentile) with Autonomous System 22773. Cox, for Private Peering

- # Domestic public peers must sustain a minimum of 150 mbit/s of aggregate traffic based on 95th percentile calculations. –wbsconnect
- # International public peers must sustain a minimum of 50 mbit/s of aggregate traffic based on 95th percentile calculations. wbsconnect
- # Any public peer sustaining in excess of 500mbit/s, domestic or international, must agree to peer privately with interconnection costs to be shared by both parties. wbsconnect
- # Private peers must sustain a minimum of 500 mbit/s of aggregate traffic based on 95th percentile calculations. Both parties shall maintain enough capacity on private interconnection ports to ensure delivery of traffic within normal SLA standards. wbsconnect
- # A minimum of 100 Mbps busy-hour traffic exchange is required (25 Mbps for international networks). Mzima

Applicant's traffic to/from the Comcast network must be on-net only and must amount to at least 7 Gbps peak in the dominant direction. Interconnection bandwidth must be at least 10 Gbps at each interconnection point. – Comcast

Applicant has a minimum traffic from the TISCALI Network of 1 Gbit/sec - judged on 95th percentile over

1 (one) month (this may be proofed with a test peering). This is a mandatory requirement. – tinet

Aggregated average traffic between LambdaNet and Peer shall be at least 20 mbps. – LambdaNet for Public Peering

LambdaNet requires 50 mbps of aggregated average traffic to justify a private peering relationship. – LambdaNet for Private Peering

Have a total minimum busy hour traffic exchange of 50Mbps with New Edge Networks' AS – NewEdge

Must maintain a minimum traffic exchange of 200Mbps (95th percentile) with AS20115 – Charter

Potential peer must be able to demonstrate usage history with an aggregate peak average usage rate greater than 70 Megabits/s or sustain an average of 4.32 Terabits/day; bi-directionally. Whichever is applicable. – Cablevision

At least 250Mb/s of aggregate traffic measured at peak times must be exchanged. Public NorthAmerica, At least 125Mb/s of aggregate traffic measured at peak times must be exchanged. For Europe, At least 125Mb/s of aggregate traffic measured at peak times must be exchanged. – Global, Private Peering At least 500Mb/s of aggregate traffic measured at peak times must be exchanged in North America., At least 500Mb/s of aggregate traffic measured at peak times must be exchanged. In Europe, At least 500Mb/s of aggregate traffic measured at peak times must be exchanged for global peering. – WVFiber

Peer's traffic to/from the interconnected AT&T US network must be on-net only and must amount to at least 3 Gbps peak in the dominant direction for peers of AS7018. At least 200 Mbps peak in the dominant direction will be required to be considered for public peering with AS7132. – AT&T

Use of IRR

Use of the Internet Routing Registry (IRR) is strongly encouraged for prompt prefix filter updates. Networks that do not provide a Routing Registry object to use for filter generation may have all routes filtered based upon some arbitrary criteria, such as mask length, or number of prefixes announced. – Speakeasy

Speakeasy maintains the right to add an entry describing any peering interconnect into the Internet Routing Registry system for the purpose of easing BGP filter generation. – Speakeasy

Routes must be registered with a recognised route registry: ARIN, RIPE or APNIC. – ATDN

Both parties are expected to register their routes in a public Internet Routing Registry (IRR) database, for the purposes of filtering. Both parties shall make good faith efforts to keep this information up to date. – nLayer

All peers are expected to utilize IRR resources. All peers will be configured with loose prefix limits based upon registered/announced routes to guard against leaks. Peers are encouraged to register routes or send notice in advance of dramatic deltas in announcements to allow for adjustments to those limits. -- RCN

Peers should register and maintain proper route objects in the RADB or mirrored IRR. – Mzima

Routes must be registered with a recognized route registry: ARIN, RIPE or APNIC. – LambdaNet

Use of the Internet Routing Registry is encouraged. OpenAccess reserves the right to make entries into the IRR on behalf of the peer if needed. – OpenAccess

Each Peer will maintain accurate prefix and routing information in a publicly accessible Internet Routing Registry (IRR). – Highwinds

Must utilize RADB or mirrored IRR resources and shall be configured with max prefix limits, allowing 25% headroom, based upon registered/announced routes – Charter

Both parties are expected to register their routes in a public Internet Routing Registry (IRR) database, for the purposes of filtering. Both parties should make good faith efforts to keep this information up to date. – WVFiber

Work to fix Problems, Spam, DDOS, etc.

Each Internet Network must be responsive to unsolicited email and network abuse complaints, as well as routing and security issues, providing a knowledgeable technician within a two-hour period after notice. – Verizon

Both parties shall be responsive to unsolicited bulk email, hacking, Denial of Service, and other network security and abuse issues. A good faith effort should be made to provide a qualified network engineer to trace ongoing network attacks within a reasonable amount of time.

Both parties shall be responsive to unsolicited bulk email and Denial of Service attacks, as well as other network abuse complaints. – NAC

tw telecom peers must agree to assist in resolving security violations, denial of service attacks, and other abuse incidents originating within the peer network. Refusal to assist may result in de-peering. – TW Telecom

Both parties shall be responsive to unsolicited bulk email, hacking, Denial of Service, and other network security and abuse issues. A good faith effort should be made to provide a qualified network engineer to trace ongoing network attacks within a reasonable amount of time. – nLayer

Both parties shall make every reasonable effort to restrict the transmission of Denial of Service attacks and packets with forged source addresses from their network. – nLayer

All peers must agree to actively cooperate in resolving at least the items in the following non-exhaustive list: - security violations - denial of service attacks - network abuse (including but not limited to spam issues) - downed peering sessions, interfaces, or circuits - disrupted, damaged, or flapping peering sessions - similar/related infrastructure and security issues - RCN

Both parties shall make every reasonable effort to limit and control Denial of Service (DoS) attacks and forged packets from within their network. – wbsconnect

All peers must agree to assist in resolving security violations, denial of service attacks, and other abuse incidents originating within the peer's, or a customer of the peer's, network. -- DALnet

Peers must be responsive to dealing with unsolicited email, denial of service attacks and other security concerns. – Mzima

Applicant must also agree to actively cooperate to resolve security incidents, denial of service attacks, and other operational problems. – Comcast

Applicant must maintain responsive abuse contacts for reporting and dealing with UCE (Unsolicited Commercial Email), technical contact information for capacity planning and provisioning and administrative contacts for all legal notices. – Comcast

Applicant must respond to all operational issues within 24 hours – tinet

Peer must cooperate in case of network abuse. On occurrence of Denial of Service attacks Peer shall implement filters on request. – LambdaNet

Peer must agree to actively cooperate to resolve security incidents, denial of service attacks, and other operational problems. – OpenAccess

Each Internet Network must be responsive to unsolicited e-mail and network abuse complaints, as well as routing and security issues, providing a knowledgeable technician within a two-hour period after notice. – Highwinds

Must agree to actively cooperate in resolving items in the following:

- a. Security violations
- b. Denial of service attacks
- c. Network abuse (including but not limited to spam issues)
- d. Downed peering sessions, interfaces, or circuits
- e. Disrupted, damaged, or flapping peering sessions
- f. Similar/related infrastructure and security issues Charter

Both parties shall be responsive to unsolicited bulk email, hacking, Denial of Service, and other network security and abuse issues. A good faith effort should be made to provide a qualified engineer to trace ongoing network attacks within a reasonable amount of time. – WVFiber

Both parties shall make every reasonable effort to restrict the transmission of Denial of Service attacks and packets with forged source addresses from their network. – WVFiber

Peer must have a professionally managed 24x7 NOC. Peer must agree to repair or otherwise remedy any problems within a reasonable timeframe. Peer must also agree to actively cooperate to resolve security incidents, denial of service attacks, and other operational problems. – AT&T