

Swisscom Peering Policy

IP-Plus (AS 3303)

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1 Scope of application

1. This Peering Policy describes the criteria of Swisscom (Schweiz) AG, also known as “IP-Plus” (AS3303), for Zero Settlement Peering. The outlined criteria shall be understood as general guideline. Swisscom reserves the right to deviate from certain provisions in individual cases or deny Zero Settlement Peering although the requirements are met.

2 Definitions

1. **Autonomous System (AS):** the representative entity dealing with IP network consistency necessary for exchanging traffic between two peering partners.
2. **Peering:** Where two interconnected networks exchange traffic strictly between their own networks. See Private Peering and Public Peering.
3. **Private Peering:** refers to the implementation of dedicated bandwidth between the parties. Traffic is exchanged on a bilateral basis via local BGP-4 peering sessions.
4. **Public Peering:** refers to the implementation of a BGP-4 peering session between peering partners via an exchange point.
5. **Route Announcement:** The means by which two peering partners notify each other of address information in order for the peering partners to exchange Internet traffic.
6. **Transit Relation:** Where one network uses another network to provide all or most of its connectivity.

3 Peering Policy

3.1 General principles

1. All Private Peering connections shall be at speeds of 10 Gbps or higher.
2. IP-Plus requires that potential peers are running an international backbone with at least 50% of the capacity of the IP-Plus backbone.
3. Peering connections shall be geographically dispersed. At least two connections are required.
4. The Partner may implement filtering (AS filtering, route filtering, max-prefix limit) but must inform IP-Plus NOC about such filtering and any modification to the filters.
5. The Partner must have route consistency at all peering points.
6. Swisscom will adapt this peering policy from time to time to reflect changes (e.g. capacity upgrades) in its network or within the Internet generally.

3.2 Infrastructure requirements

1. Each of the peering partner’s backbone hubs shall be connected to the other hubs on its own backbone at a mandatory capacity of at least 10 Gbps.
2. The peering partner shall operate a fully staffed) Network Operations Center (“NOC”) that is open twenty-four hours a day, seven days a week (24/7).
3. The peering partner shall establish “trouble ticket” and escalation procedures to resolve customer service issues.

4. The traffic ratio (inbound/outbound) shall be roughly balanced and shall not exceed 2:1.

3.3 Routing requirements

1. The peering partner shall carry out full Classless Internet Domain Routing (“CIDR”) at edge routers using BGP-4 and aggregated routes.
2. The peering partner shall register routes (routing policy) with the Internet Routing Registry (IRR) or another Internet routing registry e.g. RIPE, ARIN etc.
3. The peering partner shall implement route filtering at the partner’s network edge.
4. The peering partner shall provide consistent routing announcements, i.e. the same set of routes announced with the same autonomous system (“AS”) path length at all peering locations.
5. The peering partner shall not establish a route of last resort, i.e. default route, directed to IP-Plus’ network.
6. The peering partner shall announce only its own customer routes to IP-Plus, not any routes from any of its other peers. The peering partner shall not forward route announcements of the peering partner’s network to other peering partners.
7. All traffic exchanged between IP-Plus and its peering partners shall be carried via the peering connections established between IP-Plus and the peering partner.
8. Peers shall announce an aggregated address range of at least /11 (32 x Class-B).
9. Peers shall announce their prefixes reasonably aggregated. They should also be aware that IP-Plus is filtering inbound based on RIR minimal allocation sizes.

3.4 Traffic and capacity requirements

1. The minimal required amount of traffic is 1 Gbps for Private Peering. The traffic for Public Peering shall be a minimum of 50 Mbps and not exceed 1 Gbps.
2. Traffic volumes are measured in either direction - inbound or outbound, whichever is higher - on a monthly 95-Percentile basis.
3. Interconnection points shall make sense geographically regarding end customer footprint. E.g., Swisscom will not set up interconnections with a Peer in a location that would increase the latency.

3.5 Interconnection requirements

1. The interconnection details shall be determined according to practical and economic considerations that are sensible for both parties.
2. Neither party will apply port, service or other charges.
3. In the case of private peering which necessitates the provisioning of a local loop (such as an intra-building or a metropolitan link), all costs associated with this link shall be borne by the ordering party. Supervision, maintenance and troubleshooting is also the responsibility of the party paying for this transmission capacity.
4. Applicants shall agree to sign a Non-Disclosure Agreement (NDA) before discussing and establishing peering connections.

5. Swisscom may require the signature of a contract.

3.6 Confidentiality

1. The peering partner shall not intercept nor analyse the exchanged traffic between the peering partners on the payload level.
2. The peering partner shall not forward the exchanged traffic to third parties other than the intended recipient of the traffic nor give anybody the opportunity to do so.
3. The peering partners shall inform each other promptly, in the event of serious cases involving confidential information about ascertained or suspected infringements of data protection regulations and faults in information security and shall provide support in eliminating these.

4 Paid Peering

1. Swisscom offers Paid Peering agreements to peers who do not fulfil the criteria for Zero Settlement Peering according to this document.

5 Termination

1. Swisscom will regularly review existing Zero Settlement Peerings. If the criteria for Zero Settlement Peering are no longer met, Swisscom may cancel the peering subject to thirty (30) days written notice.