



IPC CONNEXUS EXTRANET MANAGED SERVICES SERVICE LEVEL AGREEMENT

This document details the service level agreement (the “SLA”) for delivery of IPC Connexus Extranet Managed Services (the “Connexus Extranet Network Services”). The terms set forth in this SLA are in addition to the terms and conditions of the Agreement between IPC and Customer (the “Agreement”). All defined terms contained in this SLA shall have the same meanings as defined in the Agreement unless the context requires otherwise. In the event of a conflict between any term or condition of the Agreement and a term in this SLA, the term in this SLA will govern.

1. **SERVICE DESCRIPTION.** The Connexus Extranet Network Services provides a fully-managed, secure connectivity between Customer-specified Location(s) and providers over IPC’s MPLS-based IP network. The Connexus Extranet Network Services offers the Customer a managed “end-to-end” solution infrastructure to connect to a community of service providers and users (“Third Party Members”) at tiered bandwidth subscription levels. The service levels set forth in this SLA comprise commitments from IPC to Customer. Although Third Party Members may have IPC monitored and managed equipment installed at their premises, the service level commitments contained in this SLA may only be enforced against IPC by Customer.
2. **SERVICE COMPONENTS.**
 - 2.1. **Standard Service Installations.** Connexus Extranet Network Services installations shall consist of the following elements provided by IPC, in accordance with the design criteria mutually agreed upon during the pre-ordering process.
 - (a) **Internet Protocol Service Feed (“ISF”).** The ISF is the logical IP circuit over which Connexus Extranet Network Services are delivered. This ISF is ordered and provisioned in various kilobit (Kb) increments, called subscription units (“ISF SU(s)”), by Customer for access to local and remote Locations and Third Party Members.
 - (b) **Customer Edge (“CE”) Equipment.** CE equipment will consist of one or more IPC-managed routers that will be installed at each Location(s). Each CE router will be connected to one Access Circuit (“AC”) to provide redundancy and resiliency to the Customer and the ISF(s) subscribed to. Customer may not access or modify the CE routers, or any associated IPC-provided equipment, without IPC’s prior written approval. Customer will be responsible for providing the proper space, power and cooling requirements for the CE equipment at their respective Location(s) and premises based on an IPC provided environmental specification sheet.
 - (c) **Access Circuit (“AC”).** IPC shall provide local AC(s) of sufficient capacity to connect each CE router to the associated ISF(s) at the specified IPC Points of Presence (“PoP”). ACs are provisioned and managed by IPC in accordance with the bandwidth and redundancy requirements of the solution design upon which Customer and IPC agree during the installation planning process. In standard resilient designs, IPC will make every reasonable commercial effort to provision 2 ACs to Customer’s Location(s) using diverse telecommunications carriers. Notwithstanding the foregoing, IPC may order ACs utilizing the same carrier and/or entrance facility into Customer’s Location(s) when diverse ACs are not available from different carriers on commercially reasonable terms. IPC reserves the sole discretion to select the AC provider(s) and will advise the Customer when a Customer Location has a single point of failure. IPC shall serve as Customer’s point of contact for any support or maintenance issues related to such circuits.

- (d) **Provider Edge (“PE”) Equipment.** PE equipment consists of the network equipment which resides at IPC’s PoPs and connects CE equipment to IPC’s extranet backbone.
- (e) **“Service Providers Equipment”.** Equipment consisting of the network equipment which resides at service provider(s) location and which connects to IPC’s extranet backbone.

3. STANDARD IMPLEMENTATION CONFIGURATIONS.

3.1. IPC offers the following standard implementation configurations:

- (a) Single-site, dual PoP Resilient (Default access topology)
- (b) Single-site, single PoP Resilient
- (c) Split-site, dual PoP Resilient
- (d) Split-site, single PoP Resilient
- (e) Non-resilient

3.2. All resilient configurations require minimal Customer IP networking actions and must be supported by the provider applications. Single-site configurations provide session persistency; split-site configurations contain an inherent restriction on session persistency.

3.3. Additional network topology designs are supported and will be addressed on a case-by-case basis.

4. SERVICE BANDWIDTH.

4.1. **ISF Subscription Units.** ISF SUs are subscribed in various bandwidth block sizes as executed in an Order. Customer is solely responsible for determining the ISF SU requirements. Traffic and/or bandwidth which exceeds the provisioned ISF SU bandwidth for any ISF may be discarded from IPC’s extranet, and Customer will not be entitled to any SLA credits or allowances on any bandwidth encroached ISF during the period where the provisioned ISF SU ordered by Customer is exceeded by the actual ISF SU bandwidth required for delivery of the ISF.

4.2. **Access Circuits.** During initial installation, IPC is responsible for determining the bandwidth requirements for the AC(s), based on the anticipated ISF SUs as determined by the Customer. IPC will not accept new Orders for additional Connexus Extranet Network Services or provision additional ISF SU bandwidth if the ISF SU bandwidth meets or exceeds the AC bandwidth. Customer is responsible for managing its bandwidth requirements on ACs and for notifying IPC when it is necessary to upgrade AC bandwidth. IPC shall not be held responsible for any delay that occurs in provisioning additional ISF SUs or increasing subscription units on existing ISF connections due to AC bandwidth capacity limitations.

5. BILLING COMPONENTS.

5.1. **Description of Charges.**

- (a) **Monthly Recurring Charge (“MRC”).** A MRC will be invoiced and applied for Connexus Extranet Network Services ISF SUs. All amounts payable are, unless otherwise specified, exclusive of any value added tax or any other duties, taxes, assessments, or fees that may be chargeable on any goods or services provided to Customer.
- (b) **Non-Recurring Charge (“NRC”).** A NRC will include any one-time expenses incurred while installing the service(s).

6. **SERVICE LEVEL AGREEMENTS.** In addition to any operational SLAs set forth within the Agreement, the following SLAs shall apply to the Connexus Extranet Network Services. The Connexus Extranet Network

Services provides minimum guaranteed service levels which are described below. Failure of IPC to meet the performance criteria described herein shall entitle Customer to certain SLA credits.

6.1. Service Availability (“SA”).

- (a) **Definition.** SA is the time, calculated across a calendar month, during which a CE network device and an IPC AC has the ability to send and receive packets across the Connexus Extranet Network Services. SA is measured end-to-end from the CE network device to the Service Providers Equipment and takes into account the resilience of the design in place. A calendar month will be calculated on the basis of a 30 day period less the number of minutes attributed to scheduled or emergency maintenance for which Customer was notified. SA is measured using IPC’s network management systems and is the sole and conclusive measurement for the purpose of this guarantee. SA is calculated as a percentage according to the following formula:

$$SA = [(\{total\ availability\ across\ a\ calendar\ month\ in\ minutes\} - \{outage\ time\ in\ minutes\}) / \{total\ availability\ across\ a\ calendar\ month\ in\ minutes\}] * 100$$

Example: Supposing 120 minutes of outage time and no excluded availability time due to maintenance, etc. during a calendar month.

$$SA = [((60\ min/hr * 24\ hrs/day * 30\ days/mo) - (120)) / (60 * 24 * 30)] * 100$$

$$SA = [((43200) - 120) / (43200)] * 100$$

$$SA = [(43080 / 43200)] * 100$$

$$SA = [0.99722] * 100$$

$$SA = 99.722\%$$

- (i) **Resilient Service** is the resilient deliveries from dual CE configurations with a SA target of 100.0%.
- (ii) **Non-Resilient Service** is the non-resilient delivery from a single CE configuration with a SA target of 99.9%.
- (b) **Commitment.** IPC guarantees end-to-end SA for Resilient Service and Non-Resilient Service in accordance with Table 6.1 below. Service Levels may vary depending on whether an On-Net Location is fully redundant.

Table 6.1: Service Availability Credit Schedule

Connexus Extranet Network Services Service Availability		Resilient Credit Amount (% of MRC)	Non-Resilient Credit Amount (% of MRC)
From	To		
99.999%	100.00%	N/A	N/A
99.90%	99.998%	10%	N/A
99.50%	99.89%	20%	10%
99.00%	99.49%	30%	20%
98.50%	98.99%	40%	30%
98.00%	98.49%	50%	40%
97.50%	97.99%	60%	50%
97.00%	97.49%	70%	60%
96.50%	96.99%	80%	70%
< 96.49%	96.49%	100%	80%

- (c) **Service Availability Credits.** Customer will be entitled to a credit based on the Table 6.1 of the applicable MRC for the applicable month for all affected implementations.

6.2. Service Installation.

- (a) **Definition.** Service Installation is the total time taken to install a new Location or upgrade Order.
 - (i) **New Site Installation** is when IPC must provision AC(s) and CE(s) at the Customer and/or Third Party Member end-point(s) as well as the ISF bandwidth at the Customer end-point(s).
 - (ii) **Service Upgrade** is a bandwidth upgrade to an existing ISF that was previously installed. Available capacity must exist at all end-points on the relevant AC(s) and CE(s) to accommodate the service upgrade.
 - (iii) **New Service Installation** is the addition of a new ISF and service provider onto existing AC(s) and CE(s) that are already connected to the IPC extranet. Available capacity must exist at all end-points on the relevant AC(s) and CE(s) to accommodate the new service.
- (b) **Service Installation Credits.**
 - (i) **New Site Installation.** Customer shall be entitled to 10.0% credit of NRC for the new site being ordered for each business day after target delivery date outlined in Addendum A where the Connexus Extranet Network Services have not been installed or activated; up to a maximum credit of 50.0% of the NRC. If Connexus Extranet Network Services have not been activated beyond 10 days of the target delivery date, an additional 25.0% credit will be applied against the NRC for the new site being ordered.
 - (ii) **Service Upgrade.** Customer shall be entitled to 10.0% credit of the MRC for each business day(s) following the third business day after the Order is accepted by IPC, subject to the terms set forth in Addendum A, where the Connexus Extranet Network Services have not been upgraded and activated; up to a maximum credit of 100.0% of the MRC of the impacted ISF for the month of the missed target delivery date will be applied.
 - (iii) **New Service Installation.** Customer shall be entitled to 10.0% credit of the MRC for the ISF being implemented for each business day(s) following the fifth business day after the Order is accepted by IPC, subject to the terms set forth in Addendum A, where the Connexus Extranet Network Services have not been installed and activated; up to a maximum credit of 100.0% of the MRC of the impacted ISF for the month of the missed target delivery date will be applied.

6.3. Network Latency.

- (a) **Definition.** Round trip delay (“RTD”) targets are based on the geographical location of Customer’s ACs plus core PoP to PoP connectivity. For CE Location distances of less than 100 kilometers (km) from IPC’s regional PoP, add 3 milliseconds (msec) per each AC entering IPC’s extranet to the table in Addendum B. For CE Locations distances of more than 100 kilometers (km) from IPC’s regional PoP, add 2 msec per each AC entering IPC’s extranet for the first 100 km and add a further 2 msec for each additional 100 km or portion thereof beyond the initial 100km to the table in Addendum B. Latency is measured using IPC’s network management systems and is the sole and conclusive measurement for the purpose of this guarantee.
- (b) **Commitment.** If the actual RTD between the locations detailed in Addendum B, plus the AC distance formulas set forth in Section 6.3(a), averages above the RTD level commitment thresholds specified in Table 6.3 in any given month based on a 30 day calendar month, Customer will be

entitled to a Service Credit as specified in Table 6.3 of the MRC for the particular ISF SU(s) for which the RTD commitment was not met.

Table 6.3: RTD Service Credit Schedule

RTD Exceeding Service Level	Service Credit
1.0 – 10.0 msec	10%
10.1 – 15.0 msec	20%
15.1 – 20.0 msec	30%
20.1 – 25.5 msec	40%
25.6 msec or greater	50%

ADDENDUM A – Service Installation:

New Site Installation SLA (Business Days from IPC Order Acceptance)								
Connexus POP Cities								
Connexus Access Types								
	1 x E1/T1	N x E1/T1	DS3/E3	STM1/OC3	STM4/OC12	10 mb Ethernet	100 mb FastE	1,000 mb GigE
Australia	40	40	45	60	60	60	60	65
Canada	40	40	45	60	60	60	60	65
France	45	45	55	60	60	60	60	65
Germany	45	45	55	60	60	60	60	65
Hong Kong	40	40	45	60	60	60	60	65
Japan	40	40	45	60	60	60	60	65
Singapore	40	40	45	60	60	60	60	65
United Kingdom	45	45	55	60	60	60	60	65
United States (Domestic)	40	40	45	60	60	60	60	65

Subject to the restrictions and exclusions set forth below and in the IPC Master Network Services Agreement, Customer shall be eligible for Service Credits in Section 6.2 if Customer submits supporting documentation as required by IPC to determine Customer’s eligibility. This SLA shall only apply to installations in PoP cities and connections of a capacity listed above. In addition, IPC reserves the right to not offer a SLA for any service in which IPC cannot reasonably determine future availability (including, without limitation, services where the applicable local access provider cannot give IPC firm order commitments).

The following exclusions apply to this SLA in addition to the exclusives set out in the Agreement:

- Delays of installation or provision of Service on any order that contained incorrect or incomplete information from Customer or Third Party Member, including required IP and/or configuration details.
- Delays of installation or provision of Service on any order that is a change order from the original order for such service for a given Customer location or for any order that requires special provisioning.
- Delays of installation or provision of Service on which Customer or Third Party Member or their agents have requested a delay in the delivery of services or in which Customer or Third Party Member is not prepared to accept delivery of services.
- Delays of installation or provision of Service where Customer has altered or otherwise modified the agreed upon implementation plan (general conversion of services) which reasonably impacts IPC’s ability to meet the remaining plan requirements.
- Delays of installation or provision of Service caused by Customer or Third Party Member not providing an appropriate change window to IPC.

ADDENDUM B – Round Trip Delay:

The table below provides the targeted round trip delay times in milliseconds (msec) between the IPC Connexus Extranet Network Services PoPs identified below. These figures are based upon the shortest route between IPC’s Connexus Extranet Network Services PoPs and are not applicable if there is a re-route of traffic due to major cable failure. All figures are measured utilizing IPC test equipment between the PoPs of the city pairs listed.

PoP Listing	Chicago Cermak	Chicago North Canal	Toronto Wellington	Toronto Front Street	Boston	Marlborough	New York 60 Hudson	New York 111 8th	Newark 165 Halsey	London Tower House	London Global Switch 1	Paris Telehouse	Paris Level 3	Hong Kong Telecom House	Hong Kong EQX	Singapore EQX	Singapore KC	Tokyo KVH	Tokyo @Tokyo	Sydney Global Switch	Sydney Margaret St IPC	Jakarta
Chicago Cermak		5	30	30	40	40	30	30	30	105	105	125	125	240	240	258	258	170	170	265	265	290
Chicago North Canal	5		30	30	40	40	30	30	30	105	105	125	125	240	240	258	258	170	170	265	265	290
Toronto Wellington	30	30		5	39	39	30	30	30	102	102	145	145	250	250	270	270	180	180	278	278	300
Toronto Front Street	30	30	5		39	39	30	30	30	102	102	145	145	250	250	270	270	180	180	278	278	300
Boston	40	40	39	39		5	22	22	22	90	90	110	110	265	265	290	290	214	214	280	280	320
Marlborough	40	40	39	39	5		22	22	22	90	90	110	110	265	265	290	290	214	214	280	280	320
New York 60 Hudson	30	30	30	30	22	22		5	5	85	85	105	105	270	270	285	285	200	200	290	290	315
New York 111 8th	30	30	30	30	22	22	5		5	85	85	105	105	270	270	285	285	200	200	290	290	315
Newark 165 Halsey	30	30	30	30	22	22	5	5		85	85	105	105	270	270	285	285	200	200	290	290	315
London Tower House	105	105	102	102	90	90	85	85	85		5	24	24	240	240	220	220	280	280	345	345	250
London Global Switch	105	105	102	102	90	90	85	85	85	5		24	24	240	240	220	220	280	280	345	345	250
Paris Telehouse	125	125	145	145	110	110	105	105	105	24	24		5	245	245	210	210	290	290	325	325	240
Paris Level 3	125	125	145	145	110	110	105	105	105	24	24	5		245	245	210	210	290	290	325	325	240
Hong Kong Telecom House	240	240	250	250	265	265	270	270	270	240	240	245	245		5	44	44	80	80	170	170	74
Hong Kong EQX	240	240	250	250	265	265	270	270	270	240	240	245	245	5		44	44	80	80	170	170	74
Singapore EQX	258	258	270	270	290	290	285	285	285	220	220	210	210	44	44		5	95	95	130	130	30
Singapore KC	258	258	270	270	290	290	285	285	285	220	220	210	210	44	44	5		95	95	130	130	30
Tokyo KVH	170	170	180	180	214	214	200	200	200	280	280	290	290	80	80	95	95		5	135	135	125
Tokyo @Tokyo	170	170	180	180	214	214	200	200	200	280	280	290	290	80	80	95	95	5		135	135	125
Sydney Global Switch	265	265	278	278	280	280	290	290	290	345	345	325	325	170	170	130	130	135	135		5	200
Sydney Margaret St	265	265	278	278	280	280	290	290	290	345	345	325	325	170	170	130	130	135	135	5		200
Jakarta	290	290	300	300	320	320	315	315	315	250	250	240	240	74	74	30	30	125	125	200	200	