



IPC CONNEXUS ETHERNET NETWORK SERVICES SERVICE LEVEL AGREEMENT

This document details the service level agreement (the “SLA”) for delivery of IPC’s Connexus Ethernet Network Services (“Connexus Ethernet 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.** Connexus Ethernet Network Services is a managed ethernet connection that enables end-to-end service between two point-to-point sites or multi-point sites. IPC will deliver Connexus Ethernet Network Services over dedicated network access into the Locations to enable end-to-end management of the Connexus Ethernet Network Services. IPC will provide all network elements, including Network Termination Equipment (“NTE”) required to provide the contracted service to all Locations. The demarcation point for Connexus Ethernet Network Services is the access port on the NTE located at the Locations. Not all Customer implementations will require NTE.

Each Connexus Ethernet Network Services circuit is provisioned to be a secure virtual LAN connection using dedicated bandwidth across all access circuits and the IPC core network. Connexus Ethernet Network Services circuits are provisioned according to 802.1Q tagging standards, which allows flexibility and scalability and enables IPC to manage the Connexus Ethernet Network Services and to segment Connexus Ethernet Network Services circuits over common access circuits.

2. SERVICE COMPONENTS.

- 2.1. Standard Service Installations.** Connexus Ethernet 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) Customer Edge (“CE”) equipment.** CE equipment will consist of the network devices (i.e. any device used to provide connectivity to Customer) that will be installed at each Customer Location(s) and Third Party Member Location(s). Each CE will be connected to one Access Circuit. Customer may not access or modify the CE equipment, 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.
 - (b) Access Circuit (“AC”).** IPC shall provide local AC of sufficient capacity to connect each CE router to the specified IPC Point 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. IPC reserves the right at its sole discretion to select the AC provider. IPC shall serve as Customer’s point of contact for any support or maintenance issues related to such circuits.
 - (c) Connexus Ethernet Circuit (“CEC”).** The CEC is the core component of Connexus Ethernet Network Services, providing the Customer dedicated bandwidth between PoPs. CECs 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.

- (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) **Network Termination Equipment (“NTE”).** NTE is the Equipment which connects to the AC and provides demarcation of the delivery of the Connexus Ethernet Network Services to the Location. Customer may not access or modify the NTE routers, or any associated Equipment, without IPC’s prior written approval. Customer will be responsible for providing the proper space, power and cooling requirements for the NTE at their respective Location(s) and premises based on an IPC provided environmental specification sheet.

3. BILLING COMPONENTS.

3.1. Description of Charges.

- (a) **Monthly Recurring Charge (“MRC”).** A monthly recurring charge will be invoiced and applied for Connexus Ethernet Network Service(s). 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 non-recurring charge will include any one-time expenses incurred while installing the Connexus Ethernet Network Service(s).

4. SERVICE LEVEL AGREEMENTS. The following SLAs shall apply to the Connexus Ethernet Network Services. In all instances, performance is measured using IPC’s network management systems and is the sole and conclusive measurement for the purpose of each guarantee. The Connexus Ethernet 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. Performance criteria will be evaluated on a per calendar month basis, using a 30 day period less the number of minutes attributed to scheduled or emergency maintenance for which Customer was notified.

4.1. Service Availability.

- (a) **Definition.** Service Availability (“SA”) is the time, calculated across a calendar month, during which Connexus Ethernet Network Services signals can be transmitted over the circuit in both directions. 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. Unavailable minutes will be calculated from the earlier time that (1) Customer reports the trouble, or (2) IPC detects the interruption, in either case, until the time Connexus Ethernet Network Services is restored. 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.

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

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

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

$$SA = [0.99722] * 100$$

$$SA = 99.72\%$$

- (b) **Commitment.** IPC guarantees SA in accordance with Table 4.1 below.

Table 4.1: Service Availability Credit Schedule

Connexus Ethernet Network Services Service Availability		Credit Amount (% of MRC)
From	To	
99.90%	100.00%	N/A
99.45%	99.89%	10%
98.92%	99.44%	15%
< 98.91%	98.91%	25%

- (c) **Service Availability Credits.** Customer will be entitled to a credit based on the Table 4.1 of the applicable MRC for the applicable month for all affected implementations.

4.2. Packet Delivery.

- (a) **Definition.** “Packet Delivery Rate” is defined as the percentage of packets that are successfully delivered across the IPC network. The targeted average successful Packet Delivery Rate on all Connexus Ethernet Network Services circuits is 99.9%. The Packet Delivery Rate will be calculated across a calendar month. Customers will have access via the IPC Portal to view the Packet Delivery Rate on their Connexus Ethernet Network Services circuits where NTE has been installed.
- (b) **Commitment.** If IPC fails to provide a Packet Delivery Rate of at least 99.9% in any single month, Customer will be entitled to a SLA credit equal to 5.0% of the MRC for the Connexus Ethernet Network Services circuit for which the targeted average successful Packet Delivery Rate is not met.

4.3. 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 all Connexus Ethernet Network Services, add 2 milliseconds (msec) to the tables in Addendums A, B, and C per each AC entering IPC’s network for each 100 kilometers (km) or portion thereof from IPC’s regional PoP to the Customer’s Location. Latency is measured using IPC’s network management systems and is the sole and conclusive measurement for the purpose of this guarantee. The figures in Addendums A, B, and C provide PoP to PoP latency targets and are based upon the shortest route between PoPs.
- (b) **Commitment.** If the actual RTD between the locations detailed in Addendums A, B, and C plus the AC distance formulas set forth in Section 4.3(a) on average in any given month exceeds by 15.0% the latency level commitment specified in Addendums A, B, and C plus the AC distance formulas set forth in Section 4.3(a), Customer will be entitled to a Service Credit equal to 5.0% of the MRC for the Connexus Ethernet Network Services circuit where the RTD commitment was not met. The latency commitment does not apply if there is a disruption or change in Connexus Ethernet Network Services due to the cutting of a network cable, provided such cut was not the fault of IPC or its third party suppliers.

ADDENDUM A – Americas Round Trip Delay:

The table below provides the targeted round trip delay times in milliseconds (msec) between the IPC Connexus Ethernet Network Services PoPs identified below. These figures are based upon the shortest route between IPC’s Connexus Ethernet 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	San Francisco Paul Street	Houston	Toronto Front Street	Markham 3500 Steeles	Toronto Wellington	New York 111 8th	New York 60 Hudson	Newark 165 Halsey	Weehawken 300 Boulevard	Carteret	Secaucus	Clifton	Carlstadt	Edison	Boston	Marlborough	Stamford	London Tower House	London Global Switch 1	London Slough LD4	Hong Kong EDX	Singapore EDX	Tokyo @Tokyo	Sydney IPC	Sydney Global Switch	
Chicago Cermak		0.14	58.92	36.61	12.11	12.57	11.76	20.64	20.76	18.35	18.66	18.86	18.72	18.60	18.78	18.87	33.86	27.99	30.21	92.30	92.55	90.56	248.52	286.56	237.82	237.82	238.03	
Chicago North Canal	0.14		102.98	36.74	37.41	37.85	11.90	20.78	20.90	18.48	18.80	18.99	18.86	18.74	18.92	19.00	38.43	32.06	30.34	92.43	92.67	90.68	248.40	248.40	150.70	237.91	237.70	
San Francisco Paul Street	58.92	102.98		67.20	108.66	109.08	108.98	82.91	83.02	83.23	83.02	83.56	83.13	83.36	83.64	83.71	96.62	89.76	105.72	164.47	165.53	165.73	302.99	295.82	247.26	184.69	184.90	
Houston	36.61	36.74	67.20		59.14	59.57	59.47	34.29	34.40	33.98	34.27	34.46	34.33	34.22	34.39	34.47	48.36	41.32	45.34	108.26	108.51	106.52	282.90	246.34	185.84	246.14	246.34	
Toronto Front St	12.11	37.41	108.66	59.14		0.46	0.35	27.59	27.71	27.94	27.71	28.29	27.83	28.07	28.37	28.46	9.60	16.95	19.36	110.30	111.39	111.59	283.54	319.99	186.49	272.83	273.04	
Markham 3500 Steeles	12.57	37.85	109.08	59.57	0.46		0.46	28.05	28.17	28.40	28.17	28.74	28.29	28.65	28.83	28.91	10.06	17.82	20.24	101.68	101.92	102.97	283.95	392.94	186.91	284.15	108.75	
Toronto Wellington	11.76	11.90	108.98	59.47	0.35	0.46		27.94	28.06	28.29	28.06	28.64	28.18	28.54	28.72	28.80	10.28	17.62	20.03	105.74	105.99	104.00	259.64	356.68	162.14	248.93	249.14	
New York 111 8th	20.64	20.78	82.91	34.29	27.59	28.05	27.94		0.12	0.35	0.12	0.70	0.24	0.48	0.78	0.87	14.69	7.35	24.45	75.50	75.75	73.76	271.89	295.16	174.63	260.63	260.84	
New York 60 Hudson	20.76	20.90	83.02	34.40	27.71	28.17	28.06	0.12		2.42	0.24	0.82	0.36	2.67	2.85	2.93	14.81	7.47	24.57	77.43	77.68	75.68	272.00	297.02	174.74	260.74	260.94	
Newark 165 Halsey	18.35	18.48	83.23	33.98	27.94	28.40	28.29	0.35	2.42		0.32	0.51	0.38	0.26	0.44	0.52	15.04	7.70	24.80	75.18	75.43	73.43	272.21	294.84	174.95	261.51	261.71	
Weehawken 300 Boulevard	18.66	18.80	83.02	34.27	27.71	28.17	28.06	0.12	0.24	0.32		0.51	0.48	0.57	0.75	0.83	15.35	8.01	25.11	75.47	75.72	73.72	272.49	295.13	175.23	261.22	261.43	
Carteret	18.86	18.99	83.56	34.46	28.29	28.74	28.64	0.70	0.82	0.51	1.00		0.48	0.76	0.94	1.02	15.54	8.20	25.30	75.65	75.90	73.90	272.66	295.30	175.41	261.40	261.60	
Secaucus NY2/NH4 EDX	18.72	18.86	83.13	34.33	27.83	28.29	28.18	0.24	0.36	0.38	0.48	0.48		0.63	0.81	0.89	21.99	8.07	25.17	75.53	75.77	73.78	272.54	295.18	175.29	261.28	261.48	
Clifton	18.60	18.74	83.36	34.22	28.07	28.65	28.54	0.48	2.67	0.26	0.57	0.76	0.63		0.69	0.77	15.17	7.83	24.93	75.41	75.66	73.67	272.54	295.07	175.07	272.53	261.27	
Carlstadt	18.78	18.92	83.64	34.39	28.37	28.83	28.72	0.78	2.85	0.44	0.75	0.94	0.81	0.69		0.95	15.47	8.13	25.23	75.58	75.83	73.84	272.60	295.23	175.34	261.33	261.54	
Edison	18.87	19.00	83.71	34.47	28.46	28.91	28.80	0.87	2.93	0.52	0.83	1.02	0.89	0.77	0.95		15.56	8.21	25.31	75.66	75.91	73.91	272.67	295.31	175.42	261.41	261.61	
Boston	33.86	38.43	96.62	48.36	9.60	10.06	10.28	14.69	14.81	15.04	15.35	15.54	21.99	15.17	15.47	15.56		7.35	9.76	95.35	95.60	93.60	285.11	314.30	188.09	281.47	281.68	
Marlborough	27.99	32.06	89.76	41.32	16.95	17.82	17.62	7.35	7.47	7.70	8.01	8.20	8.07	7.83	8.13	8.21	7.35		17.10	91.41	92.49	92.70	278.50	320.91	202.02	267.24	267.45	
Stamford	30.21	30.34	105.72	45.34	19.36	20.24	20.03	24.45	24.57	24.80	25.11	25.30	25.17	24.93	25.23	25.31	9.76	17.10		86.24	86.49	84.50	314.14	305.52	185.82	283.08	282.88	
London Tower House	92.30	92.43	164.47	108.26	110.30	101.68	105.74	75.50	77.43	75.18	75.47	75.65	75.53	75.41	75.58	75.66	95.35	91.41	86.24		see EMEA table	see EMEA table	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table
London Global Switch 1	92.55	92.67	165.53	108.51	111.39	101.92	105.99	75.75	77.68	75.43	75.72	75.90	75.77	75.66	75.83	75.91	95.60	92.49	86.49	see EMEA table		see EMEA table	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table
London Slough LD4	90.56	90.68	165.73	106.52	111.59	102.97	104.00	73.76	75.68	73.43	73.72	73.90	73.78	73.67	73.84	73.91	93.60	92.70	84.50	see EMEA table	see EMEA table		see APAC table	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table
Hong Kong EDX	248.52	248.40	302.99	282.90	283.54	283.95	259.64	271.89	272.00	272.21	272.49	272.66	272.54	272.54	272.60	272.67	285.11	278.50	314.14	see APAC table	see APAC table	see APAC table		see APAC table	see APAC table	see APAC table	see APAC table	see APAC table
Singapore EDX	286.56	248.40	295.82	246.34	319.99	392.94	356.68	295.16	297.02	294.84	295.13	295.30	295.18	295.07	295.23	295.31	314.30	320.91	305.52	see APAC table	see APAC table	see APAC table	see APAC table		see APAC table	see APAC table	see APAC table	see APAC table
Tokyo @Tokyo	237.82	150.70	247.26	185.84	186.49	186.91	162.14	174.63	174.74	174.95	175.23	175.41	175.29	175.07	175.34	175.42	188.09	202.02	185.82	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table		see APAC table	see APAC table	see APAC table
Sydney IPC	237.82	237.91	184.69	246.14	272.83	284.15	248.93	260.63	260.74	261.51	261.22	261.40	261.28	272.53	261.33	261.41	281.47	267.24	283.08	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table		see APAC table	see APAC table
Sydney Global Switch	238.03	237.70	184.90	246.34	273.04	108.75	249.14	260.84	260.94	261.71	261.43	261.60	261.48	261.27	261.54	261.61	281.68	267.45	282.88	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table	see APAC table		see APAC table	see APAC table

ADDENDUM B – EMEA Round Trip Delay:

The table below provides the targeted round trip delay times in milliseconds (msec) between the IPC Connexus Ethernet Network Services PoPs identified below. These figures are based upon the shortest route between IPC’s Connexus Ethernet 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	Zurich	Geneva	Stockholm	Moscow	London Slough LD4	London Tower House	London Global Switch 1	Paris Telehouse	Paris Level 3	Frankfurt FR2 EQX	Frankfurt Level 3	Tokyo EQX	Hong Kong Telecom House	Hong Kong EQX	Singapore KC	Singapore EQX	New York 111 8th	Newark 165 Halsey
Zurich		4.72	41.29	100.54	19.53	18.15	17.88	15.86	16.83	7.05	7.91	244.39	252.85	250.28	227.78	266.02	102.33	92.11
Geneva	4.72		45.81	104.94	24.24	22.86	22.60	11.14	12.11	11.76	12.63	240.14	256.34	253.77	232.02	270.26	106.73	96.52
Stockholm	41.29	45.81		107.37	26.85	25.20	25.47	34.84	35.77	34.54	35.37	243.24	259.44	256.87	234.36	272.61	108.32	98.95
Moscow	100.54	104.94	107.37		84.89	83.60	83.85	93.76	94.67	93.96	94.77	300.94	317.14	314.57	292.53	324.65	165.15	155.94
London Slough LD4	19.53	24.24	26.85	84.89		1.38	1.65	11.64	12.62	13.35	221.57	221.57	237.77	1.38	217.11	251.41	85.84	73.43
London Tower House	18.15	22.86	25.20	83.60	1.38		0.27	10.89	11.86	11.10	11.97	220.32	236.52	233.95	215.85	250.17	85.89	75.18
London Global Switch 1	17.88	22.60	25.47	83.85	1.65	0.27		28.80	12.12	10.84	11.70	220.56	0.27	234.19	215.60	249.93	85.64	75.43
Paris Telehouse	15.86	11.14	34.84	93.76	11.64	10.89	28.80		0.98	11.30	12.00	230.12	246.32	243.75	221.72	259.96	94.71	85.34
Paris Level 3	16.83	12.11	35.77	94.67	12.62	11.86	12.12	0.98		11.90	11.03	231.00	247.20	244.62	222.59	260.84	95.62	86.24
Frankfurt FR2 EQX	7.05	11.76	34.54	93.96	13.35	11.10	10.84	11.30	11.90		0.87	230.31	246.51	243.94	221.44	259.68	95.75	85.54
Frankfurt Level 3	7.91	12.63	35.37	94.77	221.57	11.97	11.70	12.00	11.03	0.87		231.09	247.29	244.72	222.21	260.46	95.72	86.35
Tokyo EQX	244.39	240.14	243.24	300.94	221.57	220.32	220.56	230.12	231.00	230.31	1.00		see APAC SLA	see APAC SLA	see APAC SLA	see APAC SLA	see APAC SLA	see APAC SLA
Hong Kong Telecom House	252.85	256.34	259.44	317.14	237.77	236.52	0.27	246.32	247.20	246.51	247.29	see APAC SLA		see APAC SLA	see APAC SLA	see APAC SLA	see APAC SLA	see APAC SLA
Hong Kong EQX	250.28	253.77	256.87	314.57	1.38	233.95	234.19	243.75	244.62	243.94	244.72	see APAC SLA	see APAC SLA		see APAC SLA	see APAC SLA	see NA SLA	see NA SLA
Singapore KC	227.78	232.02	234.36	292.53	217.11	215.85	215.60	221.72	222.59	221.44	222.21	see APAC SLA	see APAC SLA	see APAC SLA		see APAC SLA	see NA SLA	see NA SLA
Singapore EQX	266.02	270.26	272.61	324.65	251.41	250.17	249.93	259.96	260.84	259.68	260.46	see APAC SLA	see APAC SLA	see APAC SLA	see APAC SLA		see NA SLA	see NA SLA
New York 111 8th	102.33	106.73	108.32	165.15	85.84	85.89	85.64	94.71	95.62	95.75	95.72	see APAC SLA	see APAC SLA	see NA SLA	see NA SLA	see NA SLA		see NA SLA
Newark 165 Halsey	92.11	96.52	98.95	155.94	73.43	75.18	75.43	85.34	86.24	85.54	86.35	see APAC SLA	see APAC SLA	see NA SLA	see NA SLA	see NA SLA	see NA SLA	

ADDENDUM C – APAC Round Trip Delay:

The table below provides the targeted round trip delay times in milliseconds (msec) between the IPC Connexus Ethernet Network Services PoPs identified below. These figures are based upon the shortest route between IPC’s Connexus Ethernet 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	Hong Kong Telecom House	Hong Kong EQX	Shanghai	Shenzen	Kuala Lumpur Cyberjaya	Kuala Lumpur SDN BHD	Manila	Jakarta	Taipei	Bangkok TCF Tower	Bangkok SET	Seoul	Busan	Singapore KC	Singapore EQX	Tokyo KVH	Tokyo EQX	Tokyo @Tokyo	Sydney IPC	Sydney Global Switch	Melbourne	Auckland	Wellington	London TowerHouse	London Global Switch	Chicago N. Canal	San Francisco	Newark
Hong Kong Telecom House		0.53	35.33	20.40	37.12	50.66	81.76	52.96	32.16	50.10	50.10	116.47	91.63	37.82	48.70	60.05	60.27	61.31	124.39	124.60	140.17	153.52	124.60	236.52	236.76	210.92	303.14	231.17
Hong Kong EQX	0.53		34.83	20.93	52.09	50.16	81.66	56.35	31.65	49.59	49.59	47.29	35.79	39.00	39.70	59.56	60.55	60.53	123.91	124.12	137.10	153.04	167.06	233.95	234.19	248.40	302.66	326.72
Shanghai	35.33	34.83		59.89	84.64	85.00	86.88	88.80	72.17	89.64	89.64	141.11	130.11	71.90	72.58	93.47	94.47	94.44	157.22	190.79	203.77	219.71	229.48	324.40	324.17	281.11	358.71	362.25
Shenzen	20.40	20.93	59.89		66.47	68.38	33.94	70.62	70.62	67.83	67.83	119.70	110.67	57.37	56.67	79.09	79.31	80.06	143.09	143.30	158.87	172.22	186.25	252.79	253.03	255.12	321.50	341.61
Kuala Lumpur Cyberjaya	37.12	52.09	84.64	66.47		2.40	57.14	28.62	65.02	44.58	44.58	93.73	104.93	12.82	12.09	88.56	89.56	89.54	127.68	127.89	143.46	156.81	170.83	261.04	260.80	253.09	306.37	305.72
Kuala Lumpur SDN BHD	50.66	50.16	85.00	68.38	2.40		56.01	31.02	63.92	43.45	43.45	92.63	103.83	11.64	12.38	88.83	89.83	89.81	129.88	130.09	143.83	159.01	173.03	281.05	281.29	295.50	308.53	307.88
Manila	81.76	81.66	86.88	33.94	57.14	56.01		76.24	96.74	75.13	75.13	123.20	134.20	44.85	45.56	119.48	120.45	120.43	160.18	160.38	173.36	189.30	203.33	254.04	253.80	321.65	335.01	331.37
Jakarta	52.96	56.35	88.80	70.62	28.62	31.02	76.24		85.62	64.01	64.01	107.52	116.60	17.27	16.54	92.72	93.72	93.69	131.76	131.97	147.54	160.89	174.92	265.05	264.81	316.42	310.38	320.20
Taipei	32.16	31.65	72.17	70.62	65.02	63.92	96.74	85.62		84.51	84.51	83.47	94.67	54.48	55.18	90.38	91.37	91.35	154.18	154.39	169.95	183.31	197.33	263.08	262.84	278.13	326.23	340.24
Bangkok TCF Tower	50.10	49.59	89.64	67.83	44.58	43.45	75.13	64.01	84.51		4.80	111.19	122.19	32.30	33.00	107.85	108.85	108.82	151.28	151.07	164.05	179.99	194.01	242.25	242.01	254.41	320.43	319.80
Bangkok SET	50.10	49.59	89.64	67.83	44.58	43.45	75.13	64.01	84.51	1.00		111.19	122.19	32.30	33.00	107.85	108.85	108.82	151.28	151.07	164.05	179.99	194.01	242.25	242.01	254.41	320.43	319.80
Seoul	116.47	47.29	141.11	119.70	93.73	92.63	123.20	107.52	83.47	111.19	111.19		12.00	81.76	82.45	44.73	43.70	44.77	172.00	171.79	184.77	200.71	214.74	323.56	323.33	302.92	368.05	367.41
Busan	91.63	35.79	130.11	110.67	104.93	103.83	134.20	116.60	94.67	122.19	122.19	12.00		92.96	93.65	109.64	32.20	33.27	161.00	160.79	173.77	189.71	203.74	250.56	250.80	330.99	332.80	378.01
Singapore KC	37.82	39.00	71.90	57.37	12.82	11.64	44.85	17.27	54.48	32.30	32.30	81.76	92.96		0.74	77.97	78.96	78.94	205.79	161.42	176.98	190.34	204.36	250.82	250.59	285.03	296.15	295.50
Singapore EQX	48.70	39.70	72.58	56.67	12.09	12.38	45.56	16.54	55.18	33.00	33.00	82.45	93.65	0.74		77.28	78.28	78.26	116.60	116.81	132.38	145.73	159.76	250.17	249.93	285.69	295.49	294.84
Tokyo KVH	60.05	59.56	93.47	79.09	88.56	88.83	119.48	92.72	90.38	107.85	107.85	44.73	109.64	77.97	77.28		1.07	116.60	129.22	129.01	141.99	157.93	171.96	324.69	324.45	305.83	307.88	362.52
Tokyo EQX	60.27	60.55	94.47	79.31	89.56	89.83	120.45	93.72	91.37	108.85	108.85	43.70	32.20	78.96	78.28	1.07		1.12	130.20	129.99	142.97	158.91	172.94	292.34	292.58	306.79	364.10	362.92
Tokyo @Tokyo	61.31	60.53	94.44	80.06	89.54	89.81	120.43	93.69	91.35	108.82	108.82	44.77	33.27	78.94	78.26	116.60	1.12		130.18	129.97	142.95	158.89	172.91	292.32	292.56	306.77	308.82	363.45
Sydney IPC	124.39	123.91	157.22	143.09	127.68	129.88	160.18	131.76	154.18	151.28	151.28	172.00	161.00	205.79	116.60	129.22	130.20	130.18		0.23	17.21	30.46	45.12	349.02	349.25	248.61	184.36	401.74
Sydney Global Switch	124.60	124.12	190.79	143.30	127.89	130.09	160.38	131.97	154.39	151.07	151.07	171.79	160.79	161.42	116.81	129.01	129.99	129.97	0.23		14.16	30.24	44.90	349.02	349.25	248.40	184.57	401.95
Melbourne	140.17	137.10	203.77	158.87	143.46	143.83	173.36	147.54	169.95	164.05	164.05	184.77	173.77	176.98	132.38	141.99	142.97	142.95	17.21	14.16		43.81	56.95	339.20	338.97	264.10	200.14	418.34
Auckland	153.52	153.04	219.71	172.22	156.81	159.01	189.30	160.89	183.31	179.99	179.99	200.71	189.71	190.34	145.73	157.93	158.91	158.89	30.46	30.24	43.81		73.17	377.09	377.32	391.27	213.49	425.76
Wellington	124.60	167.06	229.48	186.25	170.83	173.03	203.33	174.92	197.33	194.01	194.01	214.74	203.74	204.36	159.76	171.96	172.94	172.91	45.12	44.90	56.95	73.17		365.19	364.95	404.79	223.38	439.15
London TowerHouse	236.52	233.95	324.40	252.79	261.04	281.05	254.04	265.05	263.08	242.25	242.25	323.56	250.56	250.82	250.17	324.69	292.34	292.32	349.02	349.02	339.20	377.09	365.19					
London Global Switch	236.76	234.19	324.17	253.03	260.80	281.29	253.80	264.81	262.84	242.01	242.01	323.33	250.80	250.59	249.93	324.45	292.58	292.56	349.25	349.25	338.97	377.32	364.95					
Chicago N. Canal	210.92	248.40	281.11	255.12	253.09	295.50	321.65	316.42	278.13	254.41	254.41	302.92	330.99	285.03	285.69	305.83	306.79	306.77	248.61	248.40	264.10	391.27	404.79					
San Francisco	303.14	302.66	358.71	321.50	306.37	308.53	335.01	310.38	326.23	320.43	320.43	368.05	332.80	296.15	295.49	307.88	364.10	308.82	184.36	184.57	200.14	213.49	223.38					
Newark	231.17	326.72	362.25	341.61	305.72	307.88	331.37	320.20	340.24	319.80	319.80	367.41	378.01	295.50	294.84	362.52	362.92	363.45	401.74	401.95	418.34	425.76	439.15					

