

# 2023 CIS RFP Response Summary

## Summary Results June 8, 2023

# 2023 CIS RFP It's not just the pricing!

## Wins of the CIS Program

- Early national community model of best practices in consortium contracting
- Leveraging not only pricing but key elements of the service
- Ability to secure commitment for early renewal
- No additional charging for IPv6 and BGP
- Committee works throughout the year
- Financial benefit to The Quilt community
- 3 year RFP Cycle
- Vendor webinars
- Vendor liaisons
- Vendor Reported Bandwidth – 2.68Tbps

# 2023 Authorized Quilt Providers



LUMEN<sup>®</sup>

cogent

GTT

\*Arelion

zayo<sup>®</sup>

# 2023 CIS RFP Contract Negotiations

If your pricing is better...

If you see better pricing on the street...

If you are able to negotiate better pricing...

Please let the CIS Vendor Liaison know.

Our contract has a clause honoring lower pricing and can be activated - benefiting The Quilt community.

# 2023 Quilt CIS RFP Team

- Michael Lambert, 3ROX - RFP and CIS Chair
- Barry Bryson, UETN - RFP and CIS Chair
- Andrew Cole (MARIA)
- Peter Correia (CEN)
- Dave Diller (MAX)
- Dave Farmer (Northern Lights)
- Jonah Keough (PNWGP)
- Mike LeVoir (Northern Lights)
- Gabriel Lopez (Sun Corridor)
- Brad McCoy (Indiana GigaPOP)
- Bruce Tyrell (NJEDge)
- Charles Von Lichtenberg, NoX
- Caroline Weilhamer (Indiana GigaPOP)
- Melissa Xiong (Northern Lights)

# 2023 CIS RFP Response Summary

## IP Transit

# 2023 RFP Response Pricing Snapshot

Vendor	Current Quilt Aggregated Bandwidth	400G commit 100G port	100G commit 100G port	40G commit 100G port	20G commit 100G port	10G commit 10G port	5G commit 10G port	2G commit 10G port	1G commit 10G port	1G commit 1G port
Telegeography Q1 2023	--	\$0.13	N/A	\$0.19	\$0.20	\$0.24	\$0.27	\$0.33	N/A	\$0.32
365 Data Centers	19.5G	N/A	ICB	ICB	ICB	\$0.26	\$0.30	\$0.39	\$0.48	\$0.48
Arelion	237G	N/A	\$0.100	\$0.160	\$0.170	\$0.180	\$0.250	\$0.350	\$0.400	N/A
Cogent	1,256.7G	\$0.080	\$0.080	\$0.080	\$0.080	\$0.080	\$0.080	\$0.080	\$0.080	\$0.080
GTT	175G	N/A	\$0.158	\$0.196	\$0.203	\$0.207	\$0.321	\$0.385	\$0.423	\$0.423
Lumen	805G	TBD	\$0.1200	\$0.1450	\$0.1810	\$0.2328	\$0.2755	\$0.3705	\$0.4988	\$0.4988
Zayo	189.7G	No Bid	\$0.1088	\$0.1150	\$0.1175	\$0.1350	\$0.1900	\$0.3550	\$0.4810	\$0.4810

12 Month Term

Burst Pricing may be higher according to vendor – See Vendor MSA Amendment for details

# 2023 RFP Response - Burst Pricing

Vendor	20G on 100G port	5G on 10G port	2G on 10G port	1G on 10G port
<b>365 Data Centers</b>	ICB	+ \$0.09	+ \$0.12	+ \$0.15
<b>Arelion</b>	same as committed rate	same as committed rate	same as committed rate	same as committed rate
<b>Cogent</b>	+ \$0.05	+ \$0.05	+ \$0.05	+ \$0.05
<b>GTT</b>	same as committed rate	same as committed rate	same as committed rate	same as committed rate
<b>Lumen</b>	same as committed rate	same as committed rate	same as committed rate	N/A
<b>Zayo</b>	+ \$0.0325	+ \$0.05	+ \$0.085	+ \$0.119

12 Month Term



Indicates higher burst pricing than committed bandwidth pricing



# 365 Data Centers— Pricing

**Commit Rate as of May 2023 = 19.5G**

Interface speed	Minimum Committed Data Rate	Contract Term	Monthly Price for Committed Bandwidth - per Mbps	Burst Price - per Mbps
400G	80G	12 months	N/A	
100G	100G	12 months	ICB	N/A
100G	40G	12 months	ICB	
100G	20G	12 months	ICB	
100G	10G	12 months	ICB*	ICB
10G	10G	12 months	\$0.26	N/A
10G	5G	12 months	\$0.30	\$0.39
10G	2G	12 months	\$0.39	\$0.51
10G	1G	12 months	\$0.48	\$0.63
1G	1G	12 months	\$0.48	N/A

# 365 Data Centers – Pricing

- For existing customers wishing to access the above pricing, existing contracts will need to complete their current term before changes can be made. AQP pricing can be included in a new service order for a new extended contract term executed by AQB clients committing to applicable DIA service, upon request.
- While 365 Data Centers strives to keep the 10Gb rate per Mbps the same for fixed & burst, 100Gb ports are ICB. Therefore, we must label 10Gb CDR price on 100Gb Port as ICB.
- \*Near-Net requires a Loop and cross connect, which would be at additional fees. The customer is responsible for cross-connects. Please request availability and pricing for the Loop if interested.
- 10Gb Ports provided based upon service availability. If additional build is necessary, additional charges may apply.
- 10Gb Ports incur an additional fee of \$150 per month for CDR of less than 2Gbps.
- 1Gb Ports with at least 10% CDR do not incur additional port fees. Less than 10% CDR on 1Gbps will incur additional fee.
- "ICB" = Individual Case Basis; Please request availability and pricing.
- 365 Data Centers does not typically provide multiple ASNs on a single port, primarily for security reasons. However, we will make an exception for The Quilt and associated AQB, and multiple ASNs on a single port will be supported with client agreement / acceptance of responsibility for security, should a security issue arise as a result of multiple ASNs on one port. If there's anything different that clients will need to know from a technical support and escalation standpoint, we will provide that information. Billing is supported per customer, per service.
- *There is no aggregate tiered pricing schedule offered by 365 Data Centers for The Quilt program at this time.*

# Arelion Pricing

**Commit Rate as of May 2023 = 237G**

Interface speed	Committed data rate	Contract term	Monthly price for committed bandwidth per Mbps	Burst price per Mbps	Non-recurring fees and charges
100G	100G	12 months	\$0.098	\$0.098	\$1,500 per 100G port
100G	90G	12 months	\$0.108	\$0.108	\$1,500 per 100G port
100G	80G	12 months	\$0.118	\$0.118	\$1,500 per 100G port
100G	70G	12 months	\$0.127	\$0.127	\$1,500 per 100G port
100G	60G	12 months	\$0.137	\$0.137	\$1,500 per 100G port
100G	50G	12 months	\$0.147	\$0.147	\$1,500 per 100G port
100G	40G	12 months	\$0.157	\$0.157	\$1,500 per 100G port
100G	30G	12 months	\$0.162	\$0.162	\$1,500 per 100G port
100G	20G	12 months	\$0.167	\$0.167	\$1,500 per 100G port
10G	10G	12 months	\$0.176	\$0.176	Waived for 10G ports for all AQB's.
10G	5G	12 months	\$0.245	\$0.245	Waived for 10G ports for all AQB's.
10G	4G	12 months	\$0.274	\$0.274	Waived for 10G ports for all AQB's.
10G	3G	12 months	\$0.304	\$0.304	Waived for 10G ports for all AQB's.
10G	2G	12 months	\$0.343	\$0.343	Waived for 10G ports for all AQB's.
10G	1G	12 months	\$0.392	\$0.392	Waived for 10G ports for all AQB's.

# Arelion Pricing and Discount Schedule

The Parties agree and acknowledge that the rates set forth above shall only apply to new orders or renewal orders for Internet Transit Services executed by the Authorized Qualified Buyer and Provider after the effective date of the Eighth Amendment to the Quilt Provider Master Service Agreement and shall not modify or re-rate any Service Orders in place between Provider and an Authorized Qualified Buyer.

There is a 10% discount for 24-month contract terms

There is a 15% discount for 36-month contract terms

Burst pricing is always the same as the committed bandwidth pricing

## Authorized Quilt Buyer Aggregated Discount Schedule

Current committed traffic purchases from Authorized Quilt Buyers is 237.01Gbps. When the collective committed traffic purchases from Authorized Quilt Buyers reaches an aggregation level of 250Gbps, all AQB's will receive an additional 2% discount. Another 2% discount will be given when 275Gbps is reached. These discounts will be automatically applied on a prospective basis within 1-2 billing cycles once the new aggregated commitment level is achieved for as long as the committed traffic purchases from Authorized Quilt Buyers remain above the relevant commitment threshold.

Quilt Aggregate Bandwidth Tier	Additional Discount Percentage off of Quilt AQB Pricing
250Gbps	2%
275Gbps	2%

# Arelion – Aggregated Discount

**Commit Rate as of May 2023 = 237G**

**250+ Aggregate Gbps - see MSA for more pricing information**

Interface speed	Committed Interface Rate	Contract Term	Commit Price per Mbps	Burst Price per Mbps	Non-Recurring fees and charges	Monthly Recurring fees and charges
100G	100G	12 months	\$0.098	Same as Commit	\$1,500 per 100G port	No NRC for 10G ports
100G	20G	12 months	\$0.167	Same as Commit	\$1,500 per 100G port	No NRC for 10G ports
10G	10G	12 months	\$0.176	Same as Commit	NRC waived for 10G ports for all AQB's.	No NRC for 10G ports
10G	5G	12 months	\$0.245	Same as Commit		No NRC for 10G ports
10G	2G	12 months	\$0.343	Same as Commit		No NRC for 10G ports
10G	1G	12 months	\$0.392	Same as Commit		No NRC for 10G ports

**275+ Aggregate Gbps - see MSA for more pricing information**

Interface speed	Committed Interface Rate	Contract Term	Commit Price per Mbps	Burst Price per Mbps	Non-Recurring fees and charges	Monthly Recurring fees and charges
100G	100G	12 months	\$0.096	Same as Commit	\$1,500 per 100G port	No NRC for 10G ports
100G	20G	12 months	\$0.163	Same as Commit	\$1,500 per 100G port	No NRC for 10G ports
10G	10G	12 months	\$0.173	Same as Commit	NRC waived for 10G ports for all AQB's.	No NRC for 10G ports
10G	5G	12 months	\$0.240	Same as Commit		No NRC for 10G ports
10G	2G	12 months	\$0.336	Same as Commit		No NRC for 10G ports
10G	1G	12 months	\$0.384	Same as Commit		No NRC for 10G ports

# Arelion – Pricing

The monthly rate per Mbps (for committed traffic and, where applicable, for burst traffic) available to Authorized Buyers for Internet Transit Service provided by Arelion will be based on the monthly usage commitment made by the relevant AQB to Provider. Subject to the terms below, Authorized Buyers that enter into agreements with Arelion for committed usage at the volume increments in the table below will be eligible to receive Service at the corresponding rates also listed in the table. All rates are based on a 12-month contract term. All services will be delivered over GigE, 10G or 100G ports (FastE is not available).

Pricing and Service available only upon execution of new service order form and an agreement with Provider.

Pricing is based on committed traffic per customer. Rates that are specified for committed traffic shall apply to both committed traffic and to burst traffic in excess of the relevant CDR.

All rates set forth in the table below are per Mbps, per month as measured by Provider on a monthly basis pursuant to the 95th percentile measurement methodology.

NRC is waived for 10G ports for all Authorized Quilt Buyers.

An Authorized Buyer's 95 percentile traffic measurements will be measured on a per port basis and usage from separate ports will be summed in order to reach a CDR level.

# Cogent - Pricing

Interface speed	Minimum Committed Data Rate	Contract Term	Monthly Price for Committed Bandwidth - per Mbps	DDoS Scrubbed Bandwidth Price - per Mbps	Burst Price - per Mbps	Non-Recurring fees and charges	Comments
400G	80G	12 months	\$0.08	N/A	\$0.05	ICB	ICB process determines NRC pricing and port availability
100G	100G	12 months	\$0.08	N/A	N/A	ICB	ICB process determines NRC pricing
100G	40G	12 months	\$0.08	N/A	\$0.05	ICB	ICB process determines NRC pricing
100G	20G	12 months	\$0.08	N/A	\$0.05	ICB	ICB process determines NRC pricing
100G	10G	12 months	\$0.08	N/A	\$0.05	ICB	ICB process determines NRC pricing
10G	10G	12 months	\$0.08	N/A	N/A	\$750, CNDC	
10G	5G	12 months	\$0.08	N/A	\$0.05	\$750, CNDC	
10G	2G	12 months	\$0.08	N/A	\$0.05	\$750, CNDC	
10G	1G	12 months	\$0.08	N/A	\$0.05	\$750, CNDC	
1G	1G	12 months	\$0.08	N/A	N/A	\$500, CNDC	

# Cogent On-Net Port Pricing Structure

Aggregate Bandwidth (Gbps)		Price Per Mbps (1 year Term)	Price Per Mbps (2 yr Term)	Price Per Mbps (3 yr Term)	Total Burst Price Per Mbps (1yr)
From	To	•1,000M on 1GE	•1,000M on 1GE	•1,000M on 1GE	•1GE
		•1,000M on 10GE	•1,000M on 10GE	•1,000M on 10GE	•10GE
		•2,000M on 10GE	•2,000M on 10GE	•2,000M on 10GE	•100GE
		•5,000M on 10GE	•5,000M on 10GE	•5,000M on 10GE	
		•10,000M on 10GE	•10,000M on 10GE	•10,000M on 10GE	
		•10,000M on 100GE	•10,000M on 100GE	•10,000M on 100GE	
		•20,000M on 100GE	•20,000M on 100GE	•20,000M on 100GE	
		•100,000M on 100GE	•100,000M on 100GE	•100,000M on 100GE	
0	1000	\$0.09	\$0.09	\$0.09	\$0.05
*1001	1500	\$0.08	\$0.08	\$0.08	\$0.08
1501	2000	\$0.07	\$0.07	\$0.07	\$0.05
2001	2500	\$0.065	\$0.065	\$0.065	\$0.05
2501	3000	\$0.06	\$0.06	\$0.06	\$0.05
3001	4000	\$0.055	\$0.055	\$0.055	\$0.05

\* Tier 1001 – 1500 is the current reported pricing with Cogent

Standard Port NRC			
Locations	MTOB	CNDC	Off-Net
1GE	\$500	\$500	N/A
10GE	ICB	\$750	N/A
100GE	ICB	ICB	N/A
Link Aggregation	ICB	\$625	N/A

*Standardized Port NRC where applicable*

Example Burst Pricing	Port Types GE 10GE 100GE	Current Price Per Mbps = \$0.08	Additional Burst Price Per Mbps = \$0.05	Total Burst Price Per Mbps = \$0.13
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\* Burst Price Per Meg is in addition to Port Price Per Meg



# Cogent Off-Net Port Pricing Structure

Price Per Mbps (1 YR Term)	Price Per Mbps (2 YR Term)	Price Per Mbps (3 YR Term)	Burst Price Per Mbps and NRC
• 1,000M GE - \$0.90	• 1,000M GE - \$0.80	• 1,000M GE - \$0.70	ICB
• 2,000M on 10GE - \$0.85	• 2,000M on 10GE - \$0.75	• 2,000M on 10GE - \$0.675	ICB
• 5,000M on 10GE - \$0.42	• 5,000M on 10GE - \$0.37	• 5,000M on 10GE - \$0.33	ICB
• 10,000M on 10GE - \$0.25	• 10,000M on 10GE - \$0.22	• 10,000M on 10GE - \$0.19	ICB

***Off-Net Port Pricing Structure. Loop MRC/NRC pricing not included.***

# Cogent – IPv4 Pricing Structure

## IPv4 Pricing Structure – Grandfathered and New

Quilt members with older IPv4 blocks are grandfathered under the old Cogent IPv4 Month-to-Month pricing below. There may not be an advantage for an Authorized Quilt Buyer with an older IPv4 block to sign up for a contract term block unless there is desire to align an Internet Port term with a IPv4 term.

Please see the tables below for IPv4 costs. IPv6 (/48 only) is available free of charge.

IPv4 Price List (MTM Term Only)				
Block Size	Number of IP Addresses	Standard	Premium	NRC
/29	8	\$75	\$112.50	\$0
/28	16	\$75	\$112.50	\$0
/27	32	\$75	\$112.50	\$0
/26	64	\$75	\$112.50	\$0
/25	128	\$75	\$112.50	\$0
/24	256	\$75	\$112.50	\$0
/23	512	\$150	\$225	\$0
/22	1024	\$300	\$450	\$0
/21	2048	\$600	\$900	\$0
/20	4096	N/A	\$1,800	\$0
/19	8192	N/A	\$3,600	\$0

Bandwidth Commitment (CDR in Mbps)		Standard	Premium
1	100	Up to a /24	Up to a /19
200	900	Up to a /23	Up to a /19
1,000	9,000	Up to a /22	Up to a /19
10,000	More	Up to a /21	Up to a /19

Notes to the tables: One /29 is included in each L3 port order (at all sites). For zero CDR customers, only premium pricing is available and requires an ICB. Allocations below the maximum Standard size (varies from /24 to /21) can be priced at Standard rates. Allocations between the maximum Standard and the maximum Premium size (e.g. between /24 and /19 in the first tier) need to be priced at Premium rates. Allocations larger than the maximum Premium size (/19) require an ICB.

# Cogent – IPv4 Pricing Structure

## IPv4 Term Pricing for Large IPv4 Allocation with or without Cogent IP Transit Services

- Requires Cogent ICB Approval
- Only available to eyeball or access network customers as determined by Cogent
- Must be ordered on terms of between 1 and 5 years

IPv4 /24 or Larger Allocations	Install Fee: Non-Recurring Cost (NRC)	Monthly Recurring Charge (MRC) Price per IP for IPv4 Allocations based on term length
/24 256 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/23 512 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/22 1,024 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/21 2,048 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/20 4,096 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/19 8,192 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/18 16,384 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/17 32,768 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/16 65,536 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month
/15 131,072 IPs	\$0	1-yr: \$0.28 per IP per month 2-yr: \$0.27 per IP per month 3-yr: \$0.26 per IP per month 4-yr: \$0.25 per IP per month 5-yr: \$0.24 per IP per month

# Cogent Pricing

The pricing represents port pricing for all Cogent Layer 3 Dedicated Internet Access Ethernet products and is available to any Quilt member as they complete existing contract terms. After completion of an initial term, Quilt members can elect month-to-month renewal terms for all On-Net products without a corresponding increase in price. For Off-Net products, Cogent will attempt to provide month-to-month renewal terms upon request, but is restricted to loop provider terms.

Where available, Quilt members can elect to purchase burstable circuits. The burst price per Mb is in the pricing table below is in addition to the price for the committed bandwidth. Actual usage for individual burstable circuits is billed at the 90th percentile. Actual usage across multiple circuits is summed billed at the 90th percentile or aggregately billed at the 95th percentile.

On a first-come-first serve basis, Cogent will waive all charges for BGP4 and BGP6 (up to 25 ASNs per member), Layer3 VLANs (up to 25 per member), and IPv6 allocation orders.

Quilt members should contact the account manager or other sales representative for additional product information (e.g., minimum bandwidth commitment, burstability, and available bandwidth increments).

All 100G ports are considered on an Individual Case Basis to determine availability.

All Cogent On-Net buildings are capable of accepting dark fiber handoffs on an Individual Case Basis.

Applicable MRC/NRC fees may include x-connect charges to extend service from Cogent's cabinet within a data center facility to the dark fiber providers equipment. In Corporate locations NRCs vary widely due to riser distances.

# GTT Aggregate AQB Pricing

**Commit Rate as of May 2023 = 175G**

12-Month Terms				12-Month Terms			
101- 200G*				201-300G			
BW (Mbps)	MRC	Price/Mb	Burst/Mb	BW (Mbps)	MRC	Price/Mb	Burst/Mb
500	348	0.697	0.697	500	340	0.680	0.680
1000	423	0.423	0.423	1,000	405	0.405	0.405
2000	770	0.385	0.385	2,000	761	0.381	0.381
3000	1,039	0.346	0.346	3,000	1,026	0.342	0.342
4000	1,368	0.342	0.342	4,000	1,332	0.333	0.333
5000	1,607	0.321	0.321	5,000	1,575	0.315	0.315
6000	1,794	0.299	0.299	6,000	1,755	0.293	0.293
7000	1,953	0.279	0.279	7,000	1,922	0.275	0.275
8000	2,016	0.252	0.252	8,000	2,052	0.257	0.257
9000	2,049	0.228	0.228	9,000	2,106	0.234	0.234
10000	2,070	0.207	0.207	10,000	2,025	0.203	0.203
20000	4,050	0.203	0.203	20,000	3,960	0.198	0.198
30000	5,940	0.198	0.198	30,000	5,724	0.191	0.191
40000	7,848	0.196	0.196	40,000	7,560	0.189	0.189
50000	9,675	0.194	0.194	50,000	9,225	0.185	0.185
60000	11,340	0.189	0.189	60,000	10,800	0.180	0.180
70000	13,104	0.187	0.187	70,000	12,285	0.176	0.176
80000	14,760	0.185	0.185	80,000	13,680	0.171	0.171
90000	16,038	0.178	0.178	90,000	14,985	0.167	0.167
100000	15,750	0.158	0.158	100,000	15,300	0.153	0.153

# GTT Pricing

## IP Transit Requirements:

- Client has own ASN and IP Space
- Client runs BGP
- On-Net Data Center Pricing
- Last mile loop access fees are additional if the A Loc is not at a GTT POP
- Xconn fees additional

Bandwidth Commitment (CDR in Mbps)		Standard	Premium
Port Installation NRR			
	1 Year	2 Year	3 Year
GigE (1Gbps)	\$200	\$100	Waived
10 GigE (10Gbps)	\$200	\$100	Waived
100 GigE (100Gbps)	\$200	\$100	Waived

## Service Renewals:

- Service Terms are 12 Months
- Once the contract term expires, it will revert to month-to-month for a period of an additional / cumulative six months for which the price from the previous 12 month service contract is locked in. This will allow an AQB the opportunity to complete the renewal process.

With regard to other Services, for certain other variable expenses GTT incurs, GTT typically bills a consolidated regulatory recovery surcharge that it applies to recurring service charges which recover direct and indirect amounts GTT pays to government entities and underlying providers including, without limitation, regulatory charges associated with administering and complying with government programs, property tax assessments, franchise fees and right of way costs assessed on network facilities, which are not invoiced by GTT through separate line items ("Regulatory Recovery Surcharge"). Because these expenses fluctuate, GTT charges a separate monthly Regulatory Recovery Surcharge to recover the above-referenced costs rather than include them in its base rates. For Authorized Quilt Buyers, GTT shall waive the Regulatory Recovery Surcharge (defined below) with regard to IP Transit and DDoS Mitigation Services.

GTT will provide a dedicated project manager for processing AQB orders under the program.

# GTT Aggregate AQB Pricing

12-Month Terms				12-Month Terms			
301-400 G				401-600G			
BW (Mbps)	MRC	Price/Mb	Burst/Mb	BW (Mbps)	MRC	Price/Mb	Burst/Mb
500	\$294.50	\$0.589	\$0.589	500	\$279.78	\$0.560	\$0.560
1,000	\$383.80	\$0.384	\$0.384	1,000	\$364.61	\$0.365	\$0.365
2,000	\$690.84	\$0.345	\$0.345	2,000	\$656.30	\$0.328	\$0.328
3,000	\$977.55	\$0.326	\$0.326	3,000	\$928.67	\$0.310	\$0.310
4,000	\$1,176.10	\$0.294	\$0.294	4,000	\$1,117.30	\$0.279	\$0.279
5,000	\$1,356.60	\$0.271	\$0.271	5,000	\$1,288.77	\$0.258	\$0.258
6,000	\$1,514.30	\$0.252	\$0.252	6,000	\$1,438.59	\$0.240	\$0.240
7,000	\$1,674.85	\$0.239	\$0.239	7,000	\$1,591.11	\$0.227	\$0.227
8,000	\$1,766.05	\$0.221	\$0.221	8,000	\$1,677.75	\$0.210	\$0.210
9,000	\$1,807.85	\$0.201	\$0.201	9,000	\$1,717.46	\$0.191	\$0.191
10,000	\$1,808.80	\$0.181	\$0.181	10,000	\$1,627.92	\$0.163	\$0.163
20,000	\$3,527.35	\$0.176	\$0.176	20,000	\$3,174.62	\$0.159	\$0.159
30,000	\$5,243.64	\$0.175	\$0.175	30,000	\$4,719.28	\$0.157	\$0.157
40,000	\$6,928.35	\$0.173	\$0.173	40,000	\$6,235.52	\$0.156	\$0.156
50,000	\$8,550.00	\$0.171	\$0.171	50,000	\$7,695.00	\$0.154	\$0.154
60,000	\$10,146.00	\$0.169	\$0.169	60,000	\$9,131.40	\$0.152	\$0.152
70,000	\$11,637.50	\$0.166	\$0.166	70,000	\$10,473.75	\$0.150	\$0.150
80,000	\$12,920.00	\$0.162	\$0.162	80,000	\$11,628.00	\$0.145	\$0.145
90,000	\$14,107.50	\$0.157	\$0.157	90,000	\$12,696.75	\$0.141	\$0.141
100,000	\$14,250.00	\$0.143	\$0.143	100,000	\$12,825.00	\$0.128	\$0.128

# GTT Aggregate AQB Pricing

12-Month Terms			
1000G+			
BW (Mbps)	MRC	Price/Mb	Burst/Mb
500	\$240	\$0.480	0.480
1,000	\$313	\$0.313	0.313
2,000	\$563	\$0.281	0.281
3,000	\$796	\$0.265	0.265
4,000	\$958	\$0.239	0.239
5,000	\$1,105	\$0.221	0.221
6,000	\$1,233	\$0.206	0.206
7,000	\$1,364	\$0.195	0.195
8,000	\$1,438	\$0.180	0.180
9,000	\$1,473	\$0.164	0.164
10,000	\$1,253	\$0.125	0.125
20,000	\$2,443	\$0.122	0.122
30,000	\$3,631	\$0.121	0.121
40,000	\$4,798	\$0.120	0.120
50,000	\$5,921	\$0.118	0.118
60,000	\$7,027	\$0.117	0.117
70,000	\$8,060	\$0.115	0.115
80,000	\$8,948	\$0.112	0.112
90,000	\$9,770	\$0.109	0.109
100,000	\$9,869	\$0.099	0.099



# Lumen – Pricing

**Commit Rate as of May 2023 = 805G**

Interface speed (Port Bandwidth)	Minimum Committed Data Rate per Mbps	Contract Term	Monthly Price for Committed Bandwidth per Mbps	DDoS Scrubbed Bandwidth Price	Burst Price per Mbps	Comments
400G	TBD	12 months	TBD		TBD	* See Note Below
4 x 100G	250,000	12 months	\$0.1100		\$0.1100	Commit Shared
2 x 100G	100,000	12 months	\$0.1370		\$0.1370	Commit Shared
2 x 100G	40,000	12 months	\$0.1800		\$0.1800	Commit Shared
2 x 100G	20,000	12 months	\$0.2140		\$0.2140	Commit Shared
100G	100,000	12 months	\$0.1200		N/A	
100G	40,000	12 months	\$0.1450		\$0.1450	
100G	20,000	12 months	\$0.1810		\$0.1810	
100G	10,000	12 months	\$0.2500		\$0.2500	
2 x 10G	10,000	12 months	\$0.2755		\$0.2755	Commit Shared
10G	10,000	12 months	\$0.2328		N/A	
10G	5,000	12 months	\$0.2755		\$0.2755	
10G	2,000	12 months	\$0.3705		\$0.3705	
10G	1,000	12 months	\$0.4988		\$0.4988	
1G	1,000	12 months	\$0.4988	\$1500	N/A	1G of clean traffic return is \$1500 MRC
100M	N/A	N/A	N/A	\$850	N/A	100M of clean traffic return is \$850 MRC

**\* 400G service is in trial mode, with product release scheduled for April 2023. Pricing info will be available at that time.**

# Lumen – Aggregation

**Commit Rate as of May 2023 = 805G**

Quilt Aggregate Bandwidth Tier		Discount Percentage
Minimum Gbps	Maximum Gbps	
0 *	1,000 *	0
1,001	1,200	3%
1,201	1,400	3%
1,401	1,401+	3%

## Tiered Aggregation Usage Review

\*This tier represents the Quilt's current reported tier under CenturyLink and Level 3 as Lumen purchases. Based on the most recent report completed for April 2023 the total aggregate commit of Authorized Quilt Buyers is 805Gbps.

Provider will extend price reductions to Authorized Quilt Buyers (AQB's) when the aggregate CDR of all AQB's purchasing service from Provider (including the CDRs of AQB's purchasing Services from Provider exceeds one of the volume tiers set forth in the table below and the AQB's renew existing service or sign new Service Orders for a minimum term of 12 months.

Cross connects will be priced at \$300 NRC and \$300 MRC.

# Zayo Individual Pricing Model

**Commit Rate as of May 2023 = 198G**

Interface speed	Minimum Committed Data Rate	Contract Term	Monthly \$/Mbps for Committed Bandwidth	DDoS Scrubbed Bandwidth Price - per Mbps (Optional)	Burst Price – per Mbps	Non-Recurring fees and charges
400G*	80G	12 months	No bid	No bid	No bid	No bid
100G	100G	12 months	\$0.1088	Zayo's DDOS mitigation pricing is variable based on clean bandwidth committed and feature tier requested. Table is included below.	N/A	\$0.00
100G	40G	12 months	\$0.1150		\$0.14	\$0.00
100G	20G	12 months	\$0.1175		\$0.15	\$0.00
100G	10G	12 months	\$0.1550		\$0.19	\$0.00
10G	10G	12 months	\$0.1350		N/A	\$0.00
10G	5G	12 months	\$0.1900		\$0.24	\$0.00
10G	2G	12 months	\$0.3550		\$0.44	\$0.00
10G	1G	12 months	\$0.4810		\$0.60	\$0.00
1G	1G	12 months	\$0.4810		N/A	\$0.00

*\*Zayo has plans to enable 400G ports in select markets in Q4 2023 but does not currently offer this service.*

- OneTel will serve as the third-party sales order group on behalf of Zayo for this Quilt contract.
- There are no installation fees/non-recurring charges for IP transit services
- Pricing does not include public IP addresses, 3rd Party cross connects or building access fees.
- Pricing details are included these options are included below

# Zayo Additional Terms - Pricing Model

**Commit Rate as of May 2023 = 190G**

Interface speed	Minimum Committed Data Rate	24 Month - Monthly \$/Mbps for Committed Bandwidth	36 Month - Monthly \$/Mbps for Committed Bandwidth	60 Month - Monthly \$/Mbps for Committed Bandwidth	Burst Price - per Mbps (24mo)	Non-Recurring fees and charges
400G	80G	N/A	N/A	N/A	No bid	N/A
100G	100G	\$0.0952	\$0.0906	\$0.0816	N/A	\$0.00
100G	40G	\$0.1006	\$0.0958	\$0.0863	\$0.1258	\$0.00
100G	20G	\$0.1028	\$0.0979	\$0.0881	\$0.1285	\$0.00
100G	10G	\$0.1356	\$0.1292	\$0.1163	\$0.1695	\$0.00
10G	10G	\$0.1181	\$0.1125	\$0.1013	N/A	\$0.00
10G	5G	\$0.1663	\$0.1583	\$0.1425	\$0.2078	\$0.00
10G	2G	\$0.3106	\$0.2959	\$0.2663	\$0.3883	\$0.00
10G	1G	\$0.4209	\$0.4009	\$0.3608	\$0.5261	\$0.00

# Zayo Offering – Aggregation Tiers

**Commit Rate as of May 2023 = 190G**

Quilt Aggregate Bandwidth Tier		Discount Percentage off Pricing
Minimum Gbps	Maximum Gbps	
0G	200G	0%
201G	500G	5%
501G	1000G	10%
1001G	Max+	6.50%

\*Current aggregate bandwidth for AQB is 189.7Gbps. Re-rates on existing services for new pricing will be automatically applied at the time of renewal.

# Net Neutrality Principle

Confirm that with regards to providing internet access services under a Quilt Master Service agreement, your company will adhere to the following net neutrality principles by not;

1. Blocking lawful content, applications, services, or non-harmful devices, subject to reasonable network management that is disclosed to the consumer;
2. Throttling, impairing or degrading lawful Internet traffic based on Internet content, application, or service, or use of a non-harmful device, subject to reasonable network management that is disclosed to the consumer;
3. Engaging in paid prioritization;
4. Unreasonably interfering with or unreasonably disadvantaging:
  1. An end user's ability to select, access, and use broadband Internet access service or the lawful Internet content, applications, services, or devices of their choice; or
  2. An edge provider's ability to make lawful content, applications, services, or devices available to end users.

<b>365 Data Centers</b>	Confirms
<b>Lumen</b>	Confirms
<b>Cogent</b>	Confirms
<b>GTT</b>	Confirms
<b>Telia Carrier</b>	Confirms
<b>Zayo</b>	Confirms

# Common Vendor Service Offerings

	Will Spread Committed Bandwidth over Multiple Ports	Multiple Customers on a Single Port	IPv4 Additional Charges	IPv6 Additional Charges	IPv6 enabled Across network
<b>365 Data Centers</b>	YES	YES	YES	NO	YES
<b>Arelion</b>	YES	YES	NO	NO	YES
<b>Cogent</b>	YES	YES	YES	NO	YES
<b>GTT</b>	YES	YES	NO	NO	YES
<b>Lumen</b>	YES *	YES	NO	NO	YES
<b>Zayo</b>	YES	YES	YES	NO	YES

\* Yes, as long as the total CDR is greater than the total of the minimum committed data rate for each port

# Vendor Common Service Offerings

	Member Customer Portal ?	Dark Fiber Hand-Off	Higher Burst Rate	Aggregate Pricing Program	Additional Pricing Options Available
<b>365 Data Centers</b>	YES	YES	YES	NO	NO
<b>Arelion</b>	YES	YES	NO	YES	YES
<b>Cogent</b>	YES	YES	YES	YES	YES
<b>GTT</b>	YES	YES	NO	YES	YES
<b>Lumen</b>	YES	YES	NO	YES	YES
<b>Zayo</b>	YES	YES	YES	YES	YES



# AQB Contract Transition to New Pricing

<b>365 Data Centers</b>	Existing customers can be notified of The Quilt agreement. Existing contracts will need to complete the current term before changes can be made. AQP pricing can be included in a new service order for a new extended contract term executed by AQB clients committing to applicable DIA service, on request.
<b>Arelion</b>	All current Quilt customers can renew their service based on the new rate schedule
<b>Cogent</b>	All of the existing services will be transferred to the new MSA. AQB's can transition to the new pricing upon completion of their existing contract terms or an increase in their MRC (even under a current term). All existing circuits will continue to count towards the aggregation level. AQB's will contact Cogent to request the new pricing and term length.
<b>GTT</b>	Existing AQB's may renew at the new contracted rates upon expiration of the current contract terms. Existing agreements may also be amended via an "In-Term" Re-Term with an amendment to existing services, i.e., upgrade.
<b>Lumen</b>	Services purchased under prior Quilt agreements would immediately count toward the aggregation levels under the new agreement. Pricing would transition to the new agreement upon renewal.
<b>Zayo</b>	Existing customers will be transition into the Quilt program by the execution of a sales order that references global, agreed upon Quilt master contract terms and conditions. Existing customers with more expensive per mb rates will be allowed to exit their contracts early to take advantage of Quilt rates.

# 2023 CIS RFP Response Summary

## Security

# 2023 RFP Response – Security Offering

Vendor	Scrubbed	DDoS Mitigation	Black Hole Routing	BGP Flowspec	ACLs	Additional Offerings on Separate End User Contract
<b>365 Data Center</b>	YES**	YES**	YES	NO	N/A	YES
<b>Arelion</b>	N/A	YES**	YES	YES	YES	YES**
<b>Cogent</b>	N/A	YES	YES	YES	N/A	NO
<b>GTT</b>	YES	YES**	YES	NO	N/A	YES**
<b>Lumen</b>	N/A	N/A	YES	YES	N/A	NO
<b>Zayo</b>	YES**	YES	YES	YES	N/A	YES**

\* Included in base Commodity Internet Services

\*\* Can be added as an additional services under separate contract

# 2023 RFP Response – 365 Data Centers Security Offering

- Black Holing is included in our IP transit base service.
- DDoS Mitigation subscription services include scrubbing as opposed to black holing.
- With 365 Data Centers' DDoS Protection services, we monitor and analyze your network traffic 24/7 using advanced AI and machine learning to detect certain traffic profile signatures.
- Once 365 Data Centers identifies anomalies which could be indicative of a DDoS attack, a mitigation event is automatically triggered. Traffic is re-routed to one of 365 Data Centers' scrubbing stations where malicious data packets are filtered out and clean traffic is directed back to your network.

Protection Plan	Included Attack Duration per Month	Price
Basic	1 Hour	\$185 / month
Basic Plus	4 Hours	\$730 / month
Advanced	12 Hours	\$2,185 / month
Premium	24 Hours	\$4,370 / month
Service available exclusively at selected PoP locations. Pricing may vary. Speak with a sales representative to confirm your rate.		

- Depending on package purchased, scrubbing is available for levels of service up to 24 hours for existing packages. If more time is desired, a custom agreement would be required but is available.
- Max clean traffic equals the volume in level of service subscribed. 5G DIA [Dedicated Internet Access] service can handle 5G of clean return traffic, 40G DIA can handle 40G, etc.

# 2023 RFP Response – Arelion Security Offering

**The following security services are included with the purchase of IP transit.**

1. Malicious Ingress UDP Traffic Marking and Policing (Infrastructure Protection) a. In the case of congestion due to DDoS attack this traffic will be dropped first and immediately.
  1. This function is totally controlled by Arelion Company.
  2. RTBH Technique - Implemented via BGP Community 1299
  3. ACL Port Level Service - ACL applied to Customer Ports per request

**Arelion separately offers an additional D-DoS Mitigation Service to its IP transit customers for a separate charge.**

- IP transit customers who bundle with D-DoS Mitigation Service will receive a 10% discount on IP transit.
- Initial one-time charge for customer setup
- Monthly Recurring Charge, which includes;
  - o Predefined amount of enabled protection (minutes) over contract term
  - Multiple Managed Objects (default is 5)
- Choose a 'Usage Band' that fits your needs
- Choose a 'Usage Band' to fit your risk profile
- Service is scalable to support your growth
- Minutes are only used when an attack is actively mitigated.
- Minutes are **NOT** dependent on the # of ports, size of ports, or size of attack.

The details of the Service will be as defined in the Service Order executed pursuant to the Customer Agreement.

# Arelion – Security Offering Under Separate Contract

Usage Band	Minutes allotted per year	Managed Objects	One Time Charge (Set-Up)	Single Homed	Multi Homed	Additional Minutes	Additional Object OTC	Additional Learning OTC	Term
Micro	1,260	5	\$ 2,610	\$ 530	\$ 640	\$ 5.46	\$ 270	\$ 530	12
Small	2,520	5	\$ 2,610	\$ 840	\$ 1,010	\$ 4.37	\$ 270	\$ 530	12
Entry-level	5,040	5	\$ 2,610	\$ 1,570	\$ 1,890	\$ 4.09	\$ 270	\$ 530	12
Standard	10,080	5	\$ 2,610	\$ 2,610	\$ 3,140	\$ 3.41	\$ 270	\$ 530	12
Standard+	20,160	5	\$ 2,610	\$ 4,690	\$ 5,630	\$ 3.07	\$ 270	\$ 530	12
Enhanced	40,320	5	\$ 2,610	\$ 7,820	\$ 9,390	\$ 2.56	\$ 270	\$ 530	12
Micro	1,260	5	\$ 2,480	\$ 500	\$ 610	\$ 5.18	\$ 270	\$ 530	24
Small	2,520	5	\$ 2,480	\$ 800	\$ 970	\$ 4.15	\$ 270	\$ 530	24
Entry-level	5,040	5	\$ 2,480	\$ 1,490	\$ 1,810	\$ 3.89	\$ 270	\$ 530	24
Standard	10,080	5	\$ 2,480	\$ 2,480	\$ 3,010	\$ 3.24	\$ 270	\$ 530	24
Standard+	20,160	5	\$ 2,480	\$ 4,460	\$ 5,400	\$ 2.92	\$ 270	\$ 530	24
Enhanced	40,320	5	\$ 2,480	\$ 7,430	\$ 9,000	\$ 2.43	\$ 270	\$ 530	24
Micro	1,260	5	\$ 2,350	\$ 470	\$ 580	\$ 4.91	\$ 270	\$ 530	36
Small	2,520	5	\$ 2,350	\$ 760	\$ 930	\$ 3.93	\$ 270	\$ 530	36
Entry-level	5,040	5	\$ 2,350	\$ 1,410	\$ 1,730	\$ 3.68	\$ 270	\$ 530	36
Standard	10,080	5	\$ 2,350	\$ 2,350	\$ 2,880	\$ 3.07	\$ 270	\$ 530	36
Standard+	20,160	5	\$ 2,350	\$ 4,220	\$ 5,160	\$ 2.76	\$ 270	\$ 530	36
Enhanced	40,320	5	\$ 2,350	\$ 7,040	\$ 8,610	\$ 2.30	\$ 270	\$ 530	36

# 2023 RFP Response – Cogent Security Offering

Cogent does not offer a security service product.

Cogent has a dedicated abuse team which ensures there are no egregious misuses of the network, including spamming and DDoS attacks. Cogent provides a Blackhole server and BGP communities for addressing DDoS attacks. Customers advertise affected prefixes to the Blackhole server via a BGP session to null route traffic up to a per IP basis up.

# 2023 RFP Response – GTT Security Offering

GTT offers two varieties of DDoS mitigation services to scrub traffic:

Standard and Premium. Standard is set to collect netflow data from your traffic and identify when an attack is happening where it then blackholes any DDoS traffic at our core and thus allowing your legitimate traffic to flow unimpeded. This may take up to 5 minutes.

Our premium offering is always on, meaning that all of your traffic flows through one of our scrubbing centers so that the scrubbing is done sub-millisecond and thus your sites never notice the attack except via our notifications to you. See pricing for the premium services below.



# 2023 RFP Response – GTT Security Offering

AGGREGATE CDR (across all protected ports)	DDOS MITIGATION PRICING		
	1yr	2yr	3yr
Up to 500M	\$605.15	\$586.04	\$573.00
Up to 1G	\$931.00	\$901.60	\$882.00
Up to 2G	\$1,276.80	\$1,236.48	\$1,210.00
Up to 3G	\$1,723.30	\$1,668.88	\$1,633.00
Up to 4G	\$2,074.80	\$2,009.28	\$1,966.00
Up to 5G	\$2,394.00	\$2,318.40	\$2,268.00
Up to 6G	\$2,672.35	\$2,587.96	\$2,532.00
Up to 7G	\$2,954.50	\$2,861.20	\$2,799.00
Up to 8G	\$3,116.00	\$3,017.60	\$2,952.00
Up to 9G	\$3,188.20	\$3,087.52	\$3,021.00
Up to 10G	\$3,383.90	\$3,277.04	\$3,205.00
Up to 20G	\$5,339.95	\$5,171.32	\$5,059.00
Up to 30G	\$7,720.65	\$7,476.84	\$7,314.00
Up to 40G	\$9,301.45	\$9,007.72	\$8,812.00
Up to 50G	\$10,204.90	\$9,882.64	\$9,668.00
Up to 60G	\$10,859.45	\$10,516.52	\$10,288.00

STANDARD TERM DISCOUNTS		
TERM	NRR	MRR
1yr	0%	5%
2yr	25%	8%
3yr	100%	10%

Installation NRR			
Total CDR	1 Year	2 Year	3 Year
< 1 Gbps	\$ 1,000.00	\$ 1,000.00	Waived
< 10 Gbps	\$ 1,500.00	\$ 1,000.00	Waived
< 100 Gbps	\$ 2,000.00	\$ 2,000.00	Waived

# 2023 RFP Response – Lumen Security Offering

Blackhole routing and BGP FlowSpec are included in IP services.

DDoS mitigation services are available at an additional cost. See above pricing.

- Lumen's DDoS Mitigation service re-directs customer traffic through route redirection (BGP advertisement) onto Lumen's global scrubbing centers for cleansing. Attack traffic is filtered out while clean traffic is sent back to the customer via a dedicated MPLS/ IP VPN connection, Lumen internet connection or routed GRE tunnel. The service can be subscribed to protect both Lumen and third-party internet circuits, thus giving customers the benefit of:
  - Clean traffic return delivered via GRE, Internet Direct, and/or IPVPNDirect
  - Mitigates against known layer3-4 volumetric attacks
  - "On-Demand" or service options
    - "On-Demand" – requires the customer to call into the Security Operation Center (SOC) to request mitigation.
  - Provides Time-to-Mitigate SLAs for most known attacks after traffic is on-ramped through Lumen scrubbing centers\* - Up to 10 minutes for On-demand without auto-mitigation
  - Up to 5 minutes for On-demand with auto-mitigation
  - 24/7 support and monitoring via Lumen Global Security Operations Centers (SOC)
  - Access to the real-time attack events and the historical reporting via DDoS portal

# 2023 RFP Response – Zayo Security Offering

- Zayo has included a supplementary DDoS pricing schedule above to provide multiple options for DDOS mitigation
- Quilt members can scrub a portion of their IP service and not the entire committed data rate for example a customer can order a 100G CDR circuit and order 10G of DDOS mitigation. Zayo has DDOS mitigation services for multiple use cases as outlined in this response with basic, advanced, and multicarrier
- Zayo's service is Automated and Proactive: The Zayo DDoS Protection service is system-driven and automated.
  - o Monitoring is always on and continually active; all Zayo Peering Edge routers perform monitoring of Zayo's IP traffic
  - Identification of attack traffic is also completed in the Zayo Peering Edge routers, well upstream from the customer firewall and other network devices and applications. Upon recognition of an attack, the Zayo DDoS Protection system sends an alert to the subscriber in the form of an email and/or short message service (SMS). The alert option can interact with Syslog functionality as well
  - Mitigation is incident driven and is activated in response to an attack or upon request by the subscriber. Zayo employs a two-level mitigation capability: BGP Flowspec filtering and DDoS scrubbing. Manual mitigation is initiated by the Zayo Security Operations Center ("SOC") upon request by the subscriber. Automated Mitigation can be enabled for Advanced and Multi Carrier Subscribers upon request, and provides a 'hands off' fully automated DDoS Protection service
  - Restore is an automated process for continued mitigation of traffic for targeted IP addresses to ensure that DDoS attacks are truly finished; traffic is scrubbed for a period to ensure there is no further attack and then redirected to the normal BGP routes.

# 2023 RFP Response – Zayo Security Offering

DDOS Mitigation			
Bandwidth - Clean Traffic	Multi-Carrier	Advanced	Standard
100Mb	\$805	\$391	\$313
200Mb	\$1,556	\$754	\$603
500Mb	\$1,752	\$849	\$680
1G	\$2,347	\$1,138	\$910
2G	\$2,802	\$1,358	\$1,087
3G	\$3,193	\$1,547	\$1,238
4G	\$3,548	\$1,719	\$1,375
5G	\$3,854	\$1,868	\$1,494
6G	\$4,364	\$2,114	\$1,692
7G	\$4,861	\$2,355	\$1,884
8G	\$5,357	\$2,596	\$2,077
9G	\$5,854	\$2,836	\$2,269
10G	\$6,307	\$3,056	\$2,444

*Continued on next slide*

# 2023 RFP Response – Zayo Security Offering

DDOS Mitigation (continued)			
Bandwidth - Clean Traffic	Multi-Carrier	Advanced	Standard
15G	\$8,690	\$4,210	\$3,368
20G	\$10,511	\$5,093	\$4,074
25G	\$11,825	\$5,729	\$4,584
30G	\$12,771	\$6,188	\$4,950
35G	\$13,622	\$6,600	\$5,280
40G	\$14,474	\$7,013	\$5,610
45G	\$15,325	\$7,425	\$5,940
50G	\$16,177	\$7,838	\$6,270
55G	\$16,933	\$8,204	\$6,564
60G	\$17,690	\$8,571	\$6,857
65G	\$18,447	\$8,938	\$7,150
70G	\$19,204	\$9,304	\$7,444
75G	\$19,961	\$9,671	\$7,737

# Zayo Security Offering

*Zayo also offers a Distributed Denial of Service (DDoS):*

- *Cloud-based Protection: the service redirects traffic destined for an organization to one or more DDoS scrubbing centers, where undesirable DDoS packets are filtered out and dropped. The cleansed traffic is then delivered to the organization. This requires no additional premise-based equipment to be installed at the customer site*
- *Clean Traffic Pricing Model: The customer only pays for the amount of clean traffic they will require in case of an attack, not the size of the attack*
- *Protection available from 50Mb up to 40G for clean traffic throughput requirements*

*DDoS mitigation services that are included in base Internet service:*

- *Zayo will null route/blackhole customer IPs upon request via Network Control Center (NCC) ticket or via advertised BGP community. FlowSpec is currently supported by our DDOS Mitigation Platform. Customer defined FlowSpec can be evaluated as part of our network development roadmap.*
- *Zayo can automatically update BGP prefix import filters from a specified IRR object.*

## Administrative Procedures

# 365 Data Centers - Administrative Procedures

Provider will establish a Provider Team dedicated to servicing the Quilt Agreement and Authorized Quilt Buyers. The Provider Team will have a lead person that will be the primary contact for non-technical issues.

The Provider Team may directly contact Authorized Quilt Buyers regarding their services, both in a sales mode and an on-going customer management mode.

Authorized Quilt Buyers may directly contact the Provider Team to get information about services. The Provider Team will refer the Authorized Quilt Buyers to their local team after validation of participation in the Quilt. The Authorized Quilt Buyer may already be in contact with their local team; however, to participate in the Quilt MSA they must first contact the Provider Team.

The Quilt will establish a dedicated liaison (Quilt Liaison) to be the administrative point of contact for the oversight, management, and administration of the Quilt Agreement. The Quilt Liaison will be a point of contact for Authorized Quilt Buyers to get information about processes and procedures associated with purchases made through the Quilt Agreement. They will also be available as a point of escalation in the event of unresolved problems with services from Provider.

The Provider Team is responsible for providing information to the Quilt Liaison and Quilt President and CEO to ensure the Quilt Agreement is being implemented correctly. The AQP must deliver to the Quilt Liaison on the first of every calendar quarter an Excel report containing the following information for every AQB purchasing services from the AQP under the Quilt agreement.

- Contract execution date
- Contract term
- Physical circuit being purchased
- Committed bandwidth
- Contracted price/Mb



# 365 Data Centers - Administrative Procedures

## **Non-technical Problem resolution:**

Authorized Quilt Buyers will use the Provider Team to address and handle problems as a first point of contact. If response is lacking or not acceptable, the Authorized Quilt Buyer should notify and work with the Quilt Liaison to get resolution.

## **Technical Problem resolution:**

Authorized Quilt Buyers will be provided with full contact to technical problem reporting services through the Provider. Provider trouble tickets will be issued to the Authorized Quilt Buyer's approved contacts. In the event that Authorized Quilt Buyers do not get appropriate technical response/resolution, their next point of escalation is the Provider Team Primary Contact. If they still do not get appropriate response, they should next inform the Quilt Liaison to assist in getting a response.

# 365 Data Centers - Administrative Procedures

## Primary Contact:

Name	Donna Mooney
Title	Sales Director
Organization	365 Data Centers
Phone	
Email	DMooney@365datacenters.com
Cell Phone	908-752-1454

## Quilt Liasion:

Name	Bruce Tyrrell
Title	AVP, Programs and Services
Organization	NJEDge
Phone	
Email	tyrrell@njedge.net
Cell Phone	609-276-6928

# Zayo Administrative Procedures

Provider will establish a Provider Team dedicated to servicing the Quilt Agreement and Authorized Quilt Buyers. The Provider Team will have a lead person that will be the primary contact for non-technical issues.

The Provider Team may directly contact Authorized Quilt Buyers regarding their services, both in a sales mode and an on-going customer management mode.

Authorized Quilt Buyers may directly contact the Provider Team to get information about services.

The Quilt will establish a dedicated liaison (Quilt Liaison) to be the administrative point of contact for the oversight, management, and administration of the Quilt Agreement. The Quilt Liaison will be a point of contact for Authorized Quilt Buyers (AQB) to get information about processes and procedures associated with purchases made through the Quilt Agreement. They will also be available as a point of escalation in the event of unresolved problems with services from Provider.

The Provider Team is responsible for providing information to the Quilt Liaison and Quilt President and CEO to insure the Quilt Agreement is being implemented correctly. Zayo, as the Authorized Quote Provider (AQP), must deliver to the Quilt Liaison on the first of every month an Excel report containing the following information for every AQB purchasing services from the AQP under the Quilt agreement.

- Contract execution date
- Contract term
- Physical circuit being purchased
- Committed bandwidth
- Contracted price/Mb

# Zayo Administrative Procedures

## **Non-technical Problem resolution:**

Authorized Quilt Buyers will use the Provider Team to address and handle problems as a first point of contact. If response is lacking or not acceptable, the Authorized Quilt Buyer should notify and work with the Quilt Liaison to get resolution.

## **Technical Problem resolution:**

Authorized Quilt Buyers will be provided with full contact to technical problem reporting services through the Provider from the Zayo NOC Escalation List . Provider trouble tickets will be issued to the Authorized Quilt Buyer's approved contacts. In the event that Authorized Quilt Buyers do not get appropriate technical response/resolution, their next point of escalation is the Provider Team Primary Contact. If they still do not get appropriate response, they should next inform the Quilt Liaison to assist in getting a response.

# Zayo Administrative Procedures

## PROVIDER TEAM

Primary OneTel Sales Contact Name  
Title  
Organization  
Phone  
Email  
Cell Phone

Colin Campbell  
Senior Territory Manager  
OneTel  
801-875-2936  
ccampbell@onetelgem.com  
801-214-7024

Primary Zayo Contact Name  
Title  
Organization  
Email  
Cell Phone

Gayle Nelson  
Vice President - Education  
Zayo Group  
gnelson@ena.com  
703-727-0866

Backup Zayo Contact  
Name  
Title  
Organization  
Phone  
Email  
Cell Phone

John Sheehan  
Director of Customer Services  
Zayo Group  
312-229-1256  
John.sheehan@zayo.com

Primary Pre-Sale Technical Contact  
Name  
Title  
Organization  
Phone  
Email

John Merrill  
Solutions Engineer  
Zayo Group  
702-430-2607  
john.merrill@zayo.com

# Zayo Administrative Procedures

## Primary Technical Contacts – Zayo NOC Escalation List

Name	ZAYO NOC – <b>Level 01 Escalation (IP)</b>
Title	Tech on Duty
Organization	Zayo Group
Phone	+1 866-236-2824
Email	ipncc@zayo.com
Name	ZAYO NOC – Level 02 Escalation (IP)
Title	Shift Lead Lead Technician
Organization	Zayo Group
Phone	+1 866-236-2824
Email	ipleads@zayo.com
Name	ZAYO NOC – Level 03 Escalation (IP)
Title	Escalation Manager // Manager on Duty
Organization	Zayo Group
Phone	+1 918-221-0823 // +1 914-397-2513
Email	gnocescalations@zayo.com // ipeth-manager@zayo.com
Name	ZAYO NOC – Level 04 Escalation (IP)
Title	Justin Jacques - Manager, Customer IP & Ethernet Operations
Organization	Zayo Group
Phone	+1 918-295-7044
Email	justin.jacques@zayo.com
Name	ZAYO NOC – Level 05 Escalation (IP)
Title	Sheily Mali - Head of IP & Ethernet Global Network Operations
Organization	Zayo Group
Phone	+1 289-804-3880
Email	sheily.mali@zayo.com

# Vendor Contacts

	Name	Email	Phone
<b>365 Data Centers</b>	Donna Mooney	<a href="mailto:dmooney@365datacenters.com">dmooney@365datacenters.com</a>	O: 475-470-0972 M: 908-752-1454
<b>Arelion</b>	Wes Cantrall	<a href="mailto:wes.cantrall@teliasonera.com">wes.cantrall@teliasonera.com</a>	O: 703-546-4080 M: 540-270-6812
<b>Cogent</b>	Chris Altman	<a href="mailto:caltman@cogentco.com">caltman@cogentco.com</a>	O: 312-960-6906 M: 312-351-3301
<b>GTT</b>	Dan Good	<a href="mailto:Daniel.Good@gtt.net">Daniel.Good@gtt.net</a>	M: 845-598-3505
<b>Lumen</b>	Scott Pohlman	<a href="mailto:scott.pohlman@lumen.com">scott.pohlman@lumen.com</a>	O: 314-242-5606 M: 314-550-5014
<b>Zayo</b>	Gayle Nelson	<a href="mailto:gayle.nelson@zayo.com">gayle.nelson@zayo.com</a>	O: 615-312-6056 M: 703-727-0866

# Quilt Vendor Liaison Contacts

Vendor	Name	Email	Office
<b>365 Data Centers</b>	Bruce Tyrrell, NJEdge	<a href="mailto:tyrrell@njedge.net">tyrrell@njedge.net</a>	(609) 276-6928
<b>Arelion</b>	Michael Lambert, 3ROX	<a href="mailto:lambert@psc.edu">lambert@psc.edu</a>	
<b>Cogent</b>	Barry Bryson, UEN	<a href="mailto:bbryson@uen.org">bbryson@uen.org</a>	801-585-9000
<b>GTT</b>	Caroline Weilhamer I-Light / Indiana Gigapop	<a href="mailto:cweilham@iu.edu">cweilham@iu.edu</a>	(315) 930-4614
<b>Lumen</b>	Jen Leasure, The Quilt	<a href="mailto:jen@thequilt.net">jen@thequilt.net</a>	(206) 403-3188
<b>Zayo</b>	Jennifer Griffin, The Quilt	<a href="mailto:griffin@thequilt.net">griffin@thequilt.net</a>	303-909-4687

## Quilt CIS Program Contact

**Jennifer Griffin**

[griffin@thequilt.net](mailto:griffin@thequilt.net)

303-909-4687