**The Quilt**

**IP Transit Internet Services**

**Request for Proposals**

January 6, 2020

ESSAY RESPONSE FORM

This completed form and any requested attachments must be received no later than Wednesday, February 19, 2020 11:59 pm eastern time. Please upload your RFP documents to your individual and secure RFP page on The Quilt’s Group Hub. To request instructions and access to The Quilt’s Group Hub, please contact Jennifer Griffin at griffin@thequilt.net.

Any questions on the RFP documents should be sent to qt-2020cisrfp@thequilt.net.

Only PDF or documents created in standard Microsoft office software will be accepted.  All documents should be verified with the latest version of Microsoft Office or the default PDF viewer on both Windows and macOS.

ALL RFP MATERIALS SUBMITTED AS CONFIDENTIAL BY THE PROVIDER WILL BE KEPT CONFIDENTIAL WITHIN THE QUILT.

1. **Important:  Semi-Final Provider Presentations**

Semi-finalists will provide presentations of their proposals on April 14th, 15th and 16th. These presentations will be scheduled individually. Please provide the names, titles and contact information including mailing address, phone, and e-mail of the individuals who will represent your company if selected.  At least one presenting representative must have the authority to set and negotiate pricing on behalf of your company. Semi-finalist presentations will include detailed questions on customer support, pricing, the network, and peering arrangements; be sure to select representatives who can address these questions.
2. **Provider CIS Pricing and Services Proposal –
*Please use “quiltrfp2020\_provider\_pricing\_matrix.xls” to complete items 2a-d in this section and be sure to complete all 4 tabs on the spreadsheet.***
	1. Quilt Program Pricing Matrix:  Complete the following table by filling in the chart indicating the price (for) each of the listed committed data rate (CDR) by port size, service type as well as capturing any pricing differences between raw and D-DoS scrubbed bandwidth.  Note that the D-DoS scrubbed bandwidth pricing is optional in the pricing matrix. Assume a minimum one-year contract term for completing this table. For each service offered, identify any applicable port costs such as those listed below.  We are expecting there to be no additional monthly recurring taxes or fees beyond the price per Mbps offered in the table. If there are exceptions to this expectation, please note in the comment section.
	2. Optional Additional Pricing Matrix: Use this section to offer any additional discounts on different port speeds, minimum CDRs, and any additional discounts available on multi-year contract terms that you would like to offer to The Quilt CIS program beyond those required in Section 2a).  Add additional rows as needed.
	3. Quilt Member Service Locations: Complete the following table by confirming internet service availability at the following Quilt member PoP locations at the indicated port speeds.  By indicating port speed availability, you are agreeing that the services and pricing listed in 2a) are available at the time of RFP response and WITHOUT any additional fees or charges.  Note any site exceptions in the comment field as to why it is an exception.
	4. Quilt Program Aggregation Model: Use this tab to outline your Quilt program aggregation model as detailed in the ‘Overview’ document.

		1. We encourage vendors to provide a Quilt aggregation discount pricing model that takes into account the bandwidth used across all Authorized Quilt Buyers, providing increasing discounts to all members as adoption across The Quilt increases. We encourage vendors to create bandwidth tiers that will result in increasing discounts on at least an annual basis. This provides an incentive for Quilt members to directly advocate for your service within the community. *An example of this discount structure is included in the pricing matrix.*
		2. The Quilt will consider other discount models that would provide cost-effective solutions to meet AQB requirements. An AQP will be asked to respond with a single pricing model, that will be incorporated into the MSA. Innovation and simplicity are key to alternate aggregation models.
	5. Support for multiple connections per customer such as for service resiliency, traffic management, etc. Your proposed pricing model must be able to support one AQB purchasing several circuits and spreading the AQB’s cumulative committed data rate across those circuits.

		1. Will you allow one AQB purchased CDR to be spread over multiple physical connections spreading the cumulative committed data rates (CDR) across the connections at different locations?
		2. How do you calculate the overall minimum CDR for the combined connections?
		3. Are there minimum CDR per connection?
		4. Are there additional port costs?
		5. If there are additional costs for these types of scenarios, please indicate which fees you are willing to waive for Authorized Quilt Buyers?
	6. Do you support LAG Groups (802.3ad)?)
3. **Routing Information**
	1. Please provide documentation of your supported BGP communities to control route advertisements and routing.
	2. Do you honor customer AS-padding and setting of MED values for traffic management?
	3. List all ASNs with which customers might peer.
	4. Briefly discuss your implementation of MANRS and RPKI routing security.
	5. Do you take an AS-Set from the IRR to define the routes you will receive from a customer?
4. **National Backbone Infrastructure**
	1. Please provide a complete list of your U.S. customer serving PoPs and confirm at which locations can you offer services in accordance with the pricing matrix at 100G/10G/1G?
	2. Provide a national (and international if applicable) backbone infrastructure map, including backbone link capacities and infrastructure topologies.
	3. Will you accept a dark fiber handoff from a customer at specific PoP locations? Y/N with comments on additional fees.
	4. Provide diagrams of your standard PoP infrastructure.

		1. What is your current national backbone average utilization?
		2. At what monthly percentile utilization do you initiate a circuit capacity upgrade? (e.g., 40%, 50%, 80%)
	5. What percent of the fiber facilities do you own in your backbone?
	6. Do you support jumbo frames? If so, what is the largest MTU you will configure on a customer link?

		1. Will there be an additional fee for MTUs over 1500 bytes?
	7. Do you support 802.1q VLAN tagging on customer ports?
	8. Are all of your backbone PoP locations IPv6 enabled?  If not, please explain.
	9. If there are any such PoPs, what is your timeline for offering IPv6 at them?

		1. If the nearest IP PoP to a customer is IPv4-only, are you willing to waive any charges for on-net backhaul to the nearest IPv6-enabled PoP? (Y/N with comments)
		2. If the nearest PoP to a customer is only layer 2, are you willing to waive any charges for on-net backhaul to the nearest layer 3 PoP? Y/N with comments.
5. **Peering Information**
	1. Provide a map that identifies the network’s peering infrastructure (locations and capacity)
	2. What is your total aggregate public peering and total aggregate private peering for the East, West and Central United States?
	3. What is your total aggregate public peering and total aggregate private peering for U.S, Europe, and Asia?

		1. What is the ratio of peering to transit?
		2. What percentage of your peering traffic is IPv6?
6. **Technical Support, Operations and Billing Practices**
	1. Provide a brief document detailing your company’s history, current organization, and funding sources.
	2. Provide contact information for a VP-Level executive in your organization to support customer relationship with The Quilt.
	3. Does your company participate in e-rate?  If so, what is your 498 ID (formerly known as SPIN)?
	4. Have you reviewed the sample MSA provided in the Overview document?  Yes/No

		1. Are there portions of the contract, which would be difficult for you to agree to as-is? If so, identify these sections.
		2. Will you agree to an MSA with a 1-year term and mutually agreeable renewal?
	5. Please provide the names and contact information for three references.  Include corporate, research, and education organizations where possible.
	6. Please provide a list of your active IP Transit customers that are on the Authorized Quilt Buyers (AQB) list (or indicate the number of customers).
	7. What​ ​is​ ​unique​ ​about​ ​your​ ​network?
	8. Why are you interested​ ​in​ ​participating​ ​in​ this​ ​program?
	9. How​ ​will​ ​you​ ​engage​ ​with​ ​our​ ​community​ ​to​ ​provide​ ​information about​ ​your​ ​network’s​ ​capabilities?
	10. What do you charge for providing the following customer IP address assignments and allocations?

		1. IPv4
		2. IPv6
7. **Network Policies and Practices**
	1. We expect access to all internet addresses undifferentiated by cost or performance.  Do you currently (or have plans to) prioritize traffic on your network outside of illegal or malicious traffic?
	2. Describe the security procedures and protections you have in place to prevent unauthorized access to user data that transits your network.
	3. Do you sell, rent, or share any type of analysis data, aggregated or not, such as flow, header, payload, metadata, etc. with 3rd parties, including government agencies (without a court order)?
	4. Do you inject advertising or otherwise modify web, email, DNS, or other traffic?

**The Quilt Aggregate Pricing Model Features**

Underlying the pricing model structure are service pricing components. Although AQPs and AQBs have been very successful throughout the past RFPs implementing the aggregate bandwidth approach, underlying components of the pricing structure are dynamic. These features have evolved since the initial RFP in 2001 by adjusting to significantly lower price points and popular features, such as bursting. Below are two examples of pricing features to consider when constructing an aggregation model. This list is by no means comprehensive but encourages innovation to accommodate the unique needs of the R&E community.

**Guidelines for Aggregation Model:**

When constructing an aggregation model, the size of the bands within the model should be carefully considered to incentivize growth in an aggregated bandwidth of AQB’s with a goal of AQB’s being able to move up one tier with an associated price decrease within a 12-month period.

This model could take a form that looks something like this:

|  |  |  |
| --- | --- | --- |
| Quilt Aggregate Bandwidth Tier | Discount Percentage off of pricing on Worksheet Tabs 1a) and 1b) | Exceptions |
| Minimum Gbps | Maximum Gbps |
| A | B | ZZ% |   |
| B | C | YY% |   |
| C | D | XX% |   |
| D | E | WW% |   |
| E | F | VV% |   |
| F | Max+ | UU% |   |

**Alternate Pricing Models**

While The Quilt’s experience and success points towards the requested aggregate Quilt Pricing Model outlined above, The Quilt is receptive to other models that would provide cost effective solutions to meet AQB requirements. An AQP will asked to respond with a single pricing model, that will be incorporated into the MSA. Innovation and simplicity are key to alternate responses.

**High-Capacity Needs**

Quilt members are network aggregation points for R&E organizations within a certain geographic territory. As such, these organizations have high capacity CIS needs.  Multiple 10Gbps ports and 100Gbps ports per organization are now standard. A pricing model that recognizes and encourages migration to multiple 100Gbps connections through price and aggregation incentives would be very useful.