Utah Telecommunication Open Infrastructure Agency

Request for Proposal for Network Electronics RFP # 2024ENG1

March 6, 2024

The Utah Telecommunication Open Infrastructure Agency (UTOPIA) invites you to submit a proposal to provide Network Electronics to the UTOPIA fiber optic infrastructure organization for delivering services across the UTOPIA network. The attached Request for Proposal (RFP) describes the requirements that vendor(s) or manufacturer(s) must meet to be eligible to respond. It includes questions regarding your organization, ordering processes, company financial stability, production capacities, and successful project histories.

- ❒ This RFP outlines format and content requirements for your proposal and includes a listing of critical dates. Of those dates, it is most important to note that all proposals must be received by **5:00 P.M. Mountain Time on May 3rd, 2024 via email** to rfp@utopiafiber.com. **PROPOSALS SUBMITTED AFTER THE DEADLINE WILL NOT BE CONSIDERED**. Proposals will be submitted in an approved electronic format with a letter of transmittal, as set forth below.
- ❒ Vendors or manufacturers who wish to respond to this RFP should also note we require an Intent to Respond, containing the company name and point of contact for the company, to be delivered by email to the UTOPIA Fiber email before 5:00 P.M. Mountain Time on April 19th, 2024.

Please use email to direct all questions to Jeff Meyer (rfp@utopiafiber.com) Questions received prior to the close of business on April 19, 2024 will be answered by a follow-up email to all known prospective respondents and posted on the website.

We look forward to receiving your response.
Very truly yours,

Roger Timmerman
Executive Director
UTOPIA

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1. General Information

1.1. The Entity

The Utah Telecommunication Open Infrastructure Agency (UTOPIA) is a political subdivision of the State of Utah created by interlocal agreement among 15 municipalities for the purpose of solving the last mile challenge in advanced communications for its member cities. UTOPIA's goal is to provide every household and every business access to advanced communications infrastructure, and to enable choice among services and service providers. To accomplish this objective, UTOPIA is building an open-access fiber optic network providing wholesale transport for retail service providers. Currently, the 15 member cities account for a population base of more than 500,000 individuals, 150,000+ households, and 30,000+ businesses.

1.2. Philosophy and Goals

The member communities of UTOPIA have taken the initiative to assure world-class digital connectivity for their residents based on the following principles:

1.2.1. Open Access

Like a public airport, the UTOPIA network has been designed for use by several service and content providers. We believe that a single open network allows more providers to competitively offer more services at lower cost.

A "neutral" network owner and "neutral" system operator is expected to encourage open access and a significant number of service providers, which will contribute to long term growth and stability for the benefit of the community.

1.2.2. Standards Based Architecture

The network is dependent, from a technical standpoint, on an open, standards-based architecture for broadband content services. This assures flexibility of service, modularity, and interoperability in access, interconnection, and transport. Although the special needs of service providers can be accommodated, the principle of open standards must be preserved.

1.2.3. Scalability

UTOPIA's fiber optic network can deliver much higher bandwidth than the networks of incumbent last mile carriers. Its architecture has the inherent flexibility to accommodate future bandwidth demands of residential, business, educational, governmental, and other customers without major re-design or construction.

1.2.4. Carrier Class Reliability

UTOPIA's network strives to offer carrier class reliability enabling service providers to offer products that can compete with those available from incumbent carriers. All contracts with system operators and service providers must support this commitment.

1.3. The Network

1.3.1. Physical Description

UTOPIA is continuing the process of constructing a wholesale advanced communications network. The Network uses fiber optic technology, which provides transmission of voice, data and video at speeds that are significantly faster than existing copper, cable, or satellite systems. Fiber is currently used for the backbone of the Internet and other high demand applications but has not been widely implemented over "the last mile" into homes and businesses. UTOPIA is laying the fiber optic cable necessary to connect each Member city and the homes and businesses within each Member city. The fiber optic cable is being laid both underground and overhead aerial. Other elements of the Network include conduits, inner ducts, fiber cables, splices, switches, transmitters, terminals, internal power sources and all other items necessary to operate the Network.

The Network is divided into footprints (neighborhood service areas) and interconnecting rings with design and construction partially complete in eleven Members cities.

UTOPIA currently operates a 100 percent fiber-based network. It is an active ethernet topology with no GPON systems within the network. Network equipment is placed in climate-controlled environments constantly monitored by our Network Operations Team.

1.3.2. Service Delivery

UTOPIA currently delivers services on a wholesale model in an open access environment. When a Service Provider customer signs up for a fiber connection to UTOPIA we provision a layer 2 transport circuit from the customer back to the Service Provider NNI. Each customer/circuit is configured as a point-to-point circuit. UTOPIA uses Ethernet based switches with a one customer to one switch port ratio.

1.4. Purpose / RFP Overview process

This RFP is soliciting pricing proposals from qualified vendors to provide network electronics to deliver services in the following roles:

- Routers
- Aggregation Switches
- CPE
- Ethernet over Coax Solutions
- Optical Transceivers

Vendors do not have to respond to all categories and can submit multiple responses to one or more category. The same device can be submitted for multiple categories.

Vendors can be the actual equipment manufacturer or a reseller/partner. Reseller/partners can submit multiple equipment manufacturer options.

1.4.1. Award Period

UTOPIA intends to award an open-ended contract to one or more vendors. UTOPIA will

not guarantee any purchasing volume based on an award. UTOPIA reserves the right at its sole discretion to purchase hardware as needed.

1.4.2. Intent to Respond

Vendors who plan to respond to this RFP must submit an email to rfp@utopiafiber.com by 5:00PM mountain time April 19th, 2024. The email must contain the company name and point of contact for the company. Proposals submitted by vendors who do not submit an intent to respond may not be considered.

1.4.3. Addendums, Supplements or Amendments to Request for Proposal

If it becomes necessary to revise any part of this RFP, an addendum, supplement, or amendment to this RFP will be provided only to respondents who submitted an intent to respond before the due date of April 19th.

1.4.4. Calendar of Events

The following table outlines UTOPIA's planned calendar of major events related to the RFP distribution, proposal submission, evaluation, and selection processes. UTOPIA Fiber reserves the right to modify this calendar depending on the volume of respondents to allow for required evaluation time. All respondents will be notified in writing of any calendar changes.

1.	RFP released to prospective respondents	March 6th, 2024
2.	Round one of written questions submission date	March 22nd, 2024
3.	Responses to round one questions posted	March 27th, 2024
4.	Round two of written questions submission date	April 19th, 2024
5.	Acknowledgement of Intent to Respond due	April 19th, 2024
6.	Responses to round two questions posted	April 24th, 2024
7.	Deadline for submission of proposals	May 3rd, 2024
8.	Optional 30–60-minute remote proposal presentation	May 6th through May 17th, 2024
9.	Evaluation period completes on or before	June 14th, 2024
10.	Optional extension of evaluation period	June 28th, 2024
11.	Vendor/manufacturer selection	July 10th, 2024
12.	Contract negotiation	July 31st, 2024

UTOPIA reserves the right to amend the above schedule as necessary.

2. Proposals

Proposals must follow the format prescribed below and must include the requested information and the enclosed Proposal Response Forms. Failure to complete and furnish all information requested in the form and format specified will result in disqualification. Proposals will not be accepted from any Vendor or Manufacturer that did not submit an Intent to Respond

as specified in 1.4.2. If you intend to partner with another Vendor or Manufacturer in making a proposal, the submission must be by the Vendor or Manufacturer that submitted the Intent to Respond.

2.1. Proposal Organization

Your proposal must be organized and indexed in the following format and must contain all items listed below in the sequence indicated.

a. Letter of Transmittal
b. Table of Contents
c. Section 1: Executive Summary
d. Section 2: Qualifications and Experience
e. Section 3: Client References
f. Section 4: Supplemental Information
g. Section 5: Network Electronics Proposal
h. Section 6: Cost / Pricing

Respondents may attach other materials that you feel may improve the quality of your responses. These materials must be included as items in Section 4: Supplemental Information.

2.2. Electronic Proposal Format

At a minimum, respondents must submit their entire proposal electronically via email including text, spreadsheets, graphics and diagrams, and other materials submitted in the Appendices. Electronic files must be submitted as follows: word processing documents and graphics/diagrams in Microsoft Word and/or Adobe Acrobat (.pdf); spreadsheets in Microsoft Excel. The email or package and files must be clearly marked with the Vendor's name and the RFP number. If large file sizes restrict email submission UTOPIA can accept the files through a cloud file sharing service provided by the vendor. Alternatively, vendors can contact UTOPIA for a file transfer option.

2.2.1. Letter of Transmittal

A single letter of transmittal must accompany any proposal. The letter must accompany the proposals as a standalone page or file and must:

a. Identify the submitting organization.
b. Identify the name and title of the person authorized to contractually obligate the organization.
c. Identify the name, title and telephone number of the person authorized to negotiate the contract.
d. Identify the names, titles, and telephone numbers of persons to be contacted for clarification.
e. Be signed by the person authorized to contractually obligate the organization.

2.2.2. Table of Contents

The table of contents must be placed immediately after any cover page and before the Executive Summary.

2.2.3. Executive Summary

Label this section "Section 1: Executive Summary" in your proposal. In two pages or less, highlight the significant aspects of your proposal including an outline of your organization, your management processes, financial strength and production capacities, qualifications and experience, client references, and anything else that is pertinent.

2.2.4. Qualifications and Experience

Label this section "Section 2: Qualifications and Experience" in your proposal. Provide information on relevant personnel from your company with whom UTOPIA would work, should you win a contract; this is essentially your proposed UTOPIA Team. Also include their general availability – whether they will be dedicated to UTOPIA and where will they be located.

2.2.5. Client References

Label this section "Section 3: References" in your proposal. Please provide a list of no more than five references of paying customers of your company. The list must provide a customer name, description of the products provided, and a brief description of the project history (timelines, challenges, etc.). For each customer reference, include contact names, phone numbers, and email addresses for staff related to procurement and project management.

2.2.6. Supplemental Information

If included, label this section "Section 4: Supplemental Information" in your proposal. Company brochures and other supplementary and marketing materials may be included in this section of the proposal.

2.2.7. Detailed Response to Network Electronics

Label this section "Section 5: Network Electronics Proposal" in your proposal. This section is where the vendor should propose their products for the various use cases UTOPIA has outlined. In this section, the vendor should clearly state the model number being submitted for the proposal, and the software version to be evaluated including whether the software is for evaluation purposes only or in general release.

2.2.8. Cost/Pricing

Label this section "Section 6: Cost/Pricing" in your proposal. Should be submitted in Excel format.

2.2.9. Optional Oral Presentations

Oral presentations will be allowed as an option for this RFP. UTOPIA plans to perform these oral presentations remotely over an application such as Microsoft Teams. UTOPIA will not require vendors to be physically present, and the oral presentation is optional unless requested by

UTOPIA.

UTOPIA plans to schedule these presentations between May 6th – May 17th. These presentations introduce the vendor's team to the UTOPIA technical team. The vendor can cover any background information and allow the UTOPIA team to clarify any parts of the vendor's response. The oral presentation is not scored itself but can allow UTOPIA to better interpret the vendor's response.

No more than 60 minutes will be allocated to a single vendor for their presentation. Oral presentations can be scheduled through Jeff Meyer at rfp@utopiafiber.com.

3. Network Electronics

To allow creativity in the proposal process this RFP will not require mandatory pricing structures but will accept alternate pricing proposals. UTOPIA is open to any workable and cost-efficient proposal.

3.1. Assumptions/Requirements

Along with the goals listed in Section 1 above, UTOPIA has made these various high-level assumptions/requirements regarding Network Electronics:

3.1.1. Anticipated Scope of Electronics Deployment

Although the UTOPIA network will eventually expand to include tens of thousands, and even hundreds of thousands, of subscribers over its lifetime, UTOPIA uses a phased deployment approach. UTOPIA will order equipment as needed.

3.1.2. Licensed Features

If a feature is licensed it will be scored as supported with costs being weighed in section 4 Network Device Costs. If a technical feature is licensed but no costs are submitted for the license that feature will not be scored.

3.1.3. Different Feature Scoring for Different Sections

UTOPIA is seeking Network Electronics for different applications on the network. UTOPIA may weigh the same feature differently depending on what role the Network Electronics are performing.

3.1.4. Hardware Requirements

UTOPIA expects vendor responses to be for newly manufactured hardware. UTOPIA will not consider used or refurbished hardware as a valid response to the RFP. However, UTOPIA will accept used or demonstration equipment for evaluation of technical features of the platform.

3.1.5. Support Offerings

Please include any costs for software download and TAC support for any device/platform offered in the RFP response.

3.1.6. Evaluation Requirements

UTOPIA will review vendor proposals and decide which equipment we currently would like to evaluate and approve. Some device categories may be placed in this RFP to gain insight into market trends for future business case planning. After reviewing the proposals, UTOPIA will notify vendors of the equipment needed to complete evaluations. If a previous vendor is resubmitting equipment that has already been previously reviewed and approved, UTOPIA will determine if another evaluation is necessary.

UTOPIA expects vendors to provide evaluation hardware to verify technical features within 14 business days of the close of the RFP response period. UTOPIA will work with vendors to have hardware ship before the close of the RFP. UTOPIA will also agree to return any evaluation hardware if requested by the vendor. The UTOPIA mailing address is:

C/O Jeff Meyer
5858 S 900 E
Murray UT, 84121

3.2. Network Devices

The proposed switch solution should be a robust feature rich platform that includes the following features:

3.2.1. General Features for all Devices

The General Features section covers what UTOPIA thinks should be base capabilities for a switch to function on the UTOPIA network.

3.2.1.1. Port Density

We are currently looking for routers with the following minimal port/speeds and densities. We would also be interested in seeing devices with additional port capacity of the same port speed layout. These port layouts are general suggestions based on current deployments. Vendors are welcome to submit devices which do not follow these suggestions if they believe it is appropriate for the role.

- Routers
  - TOR – SFP+/QSFP28
    - Small Deployment – 12x SFP+ ports / 8x SFP28 ports/ 2x QSFP28 ports
    - Medium Deployment – 24x SFP+ ports / 6x QSFP28 ports
- Aggregation Switches
  - 48x SFP ports / 4x SFP+ ports
  - 48x SFP+ ports / 4x QSFP28 ports
- Business CPE
  - 6x 10/100/1000BaseT RJ-45 ports / 2x SFP ports

    - 6x 10/100/1000BaseT RJ-45 ports / 4x SFP ports / 2x SFP+
    - 6x SFP+ / 2x QSFP28
- Residential CPE (1G Capacity)
    - 4x 10/100/1000BaseT RJ-45 ports / SFP or BiDi 1490nm Rx/1310 Tx
- Residential CPE (10G Capacity)
    - 1x 10G customer facing port (copper or SFP+) /any combination of 10/100/1000BaseT RJ-45 ports/ 1x SFP+ or fixed optic WAN port
- MDU Service Delivery using Coax and any CPE to reconvert back to Cat5e
    - 2x SFP+ and 8 or more Coax Ports. Plus quote any CPE costs.

3.2.1.2. Scoring

Please see the scoring matrix spreadsheet to check for all scoring criteria for all categories.

3.2.1.3. Feature Summary

Some features included in this list are mandatory and will be scored as pass/fail. Please see the scoring spreadsheet to see details on scoring criteria.

- General
    - Should be MEF 2.0 or 3.0 certified.
    - Have support for AC and –48v DC power supplies
    - All devices must support 19" racks
    - Product recommendations must have at least 5 years or longer of planned support from the company.
    - All devices should support third-party optics.
    - MTU should support at least 9216 bytes.
    - Should support EtherTypes of 0x8100 and/or 0x88a8 for VLAN tags.
    - Any customer facing interface must a method of isolation between layer 2 interfaces in a VPLS/EVPN/VLAN.
    - Must support IGMP video traffic on a layer 2 vlan.
        - IGMP v2 snooping must also be supported.
    - Must support at least 2Gbps+ of multicast traffic on the device.
    - Must be able to apply an ACL for layer-2 or layer-3 traffic matching/action on a layer 2 interface.
        - Layer 2 should be able to match src/dst mac address, ethertype
        - Layer 3+ should be able to support src/dst IP, port, protocol
        - It is preferred to be able to have an option to log matched traffic
    - Must support 802.3ad LACP link aggregation
    - Must support SNMP, TACACS/Radius AAA, SSH/Telnet, NTP, LLDP
    - Virtual IP interfaces on switch VLANS/layer 2 services.
    - Should have a method of Zero-touch initial provisioning. Switch should be able to contact a DHCP server and obtain firmware and base configuration files to boot up.
    - Should have netconf or grpc based support for interfacing with the device via API or other automation tools.
    - Should have support for IPv6 addressing on any layer 3 interface.
    - Not required, but having options for extended temperature range devices is

desirable

- QoS
  - Be able to support at least 8 queues per physical port and prioritize traffic based on 802.1p bits.
  - Be able to rate limit a physical port or layer 2 interface to a specific speed.
- FDB Table
  - Should be able to set aging timers for layer 2 services and be able to clear out specific entries.
  - Should be able to limit the number of mac addresses that are able to be learned by a layer 2 interface.
  - Should be able to rate limit unknown-unicast/broadcast traffic on a per layer 2 interface basis.
  - Have a method of mac learning priority or protection to make uplink learned mac addresses have priority over other interfaces.

Role Specific Requirements

- Routers
  - IP/MPLS
    - Must support label depth of 8 or more.
    - Must have EVPN and VPLS service type support.
    - Must have support for ISIS/OSPF segment routing.
- Aggregation Switches
  - DHCP Snooping
    - Be able to offer DHCP snooping to modify option 82 information.
  - Preferred to have IP/MPLS support, but layer 2 switches are fine.
  - Switches should support the ability to have a logical stack of switches to provide a single management plane to multiple physically connected switches.
- CPE
  - Should be able to support QinQ encapsulation on any layer 2 interface.
  - Residential CPE must support TR069 for provisioning/management.

4. Network Device Costs

UTOPIA will be evaluating unit costs based on several criteria, cost per port, upfront capital costs, support costs, licensing costs, transceiver costs (if not compatible with UTOPIA supplied transceivers) and any costs that would be incurred by UTOPIA to install and support the platform. Additional costs or cost reductions such as volume discounts will also be evaluated.

4.1. Assumptions

UTOPIA expects unit costs to decrease during the life of an electronics platform. For this RFP, UTOPIA expects costs to remain consistent for the first 12 months after the award. After the first 12-month period UTOPIA may choose to enter into additional annual contracts or choose to negotiate price on a per order basis. All costs should be listed in US Dollars.

4.2. Payment Terms

UTOPIA will be issuing purchase orders (POs) for equipment. UTOPIA uses the term NET30 for payment of invoices. Payment will be made in US Dollars only. UTOPIA will issue payments for NET30 terms the later date of invoice received, or material received.

4.3. Equipment Costs

The vendor will submit an MS Excel spreadsheet that lists all part numbers that UTOPIA will need to implement the solution and a per unit cost for each part number.

4.4. Platform Costs

This section will list the cost details UTOPIA will be evaluating. UTOPIA will be using the costs from the vendor supplied spreadsheet. UTOPIA will be using cost evaluations based on per port costs and/or total costs of the platform. UTOPIA will be basing cost scores on internal roles spelled out in the scoring matrix spreadsheet. UTOPIA may choose to score the same platform in different roles. Scores will include hardware costs and any mandatory licensing costs. Vendors are encouraged to provide pricing on additional options such as power supplies and mounting brackets. Support costs will be evaluated separately unless the vendor states that support is mandatory.

4.4.1. Licensing Costs

The vendor must state any licensing costs for features detailed in Section 3. Please state if licensing costs are annual or one time.

4.4.2. Transceiver Costs

The vendor must state transceiver costs for the types listed in Section 3 if the platform does not support 3rd party transceivers.

4.5. Support Costs

The vendor will need to list any mandatory support contract details. If a paid support contract is mandatory those costs will be part of the calculation. UTOPIA would like to see optional support costs that cover the following criteria. A vendor only needs to respond to criteria it supports. If the vendor has other support options it feels would be useful, it is free to submit those options.

- 24x7x365 full support – hardware and software
- Business hours only support
- Per incident support costs
- Replace and Return hardware support
- Online only support.
- Professional Services
- Software updates

4.6. Miscellaneous Costs

The vendor can state any other costs here not detailed in previous sections such as software

costs.

4.7. Volume Discounts

UTOPIA recognizes that several vendors offer volume discounts. Volume discounts are not required to be submitted as part of the RFP. UTOPIA has three requirements for volume discounts:

- The discount period for purchasing cannot be more than 12 months.
- Purchasing amount cannot exceed $250,000 during a 12-month period.
- UTOPIA will not commit to purchasing more than 10000 UNI ports worth of equipment in a 12-month period.
- The $250,000 limit is per role, meaning that Top of Rack switch, Edge access switch, 10G Business Aggregation switch, 1G Business Aggregation switch and Residential Service Delivery device would each have a separate $250,000 volume.

If submitting volume discounts, please list volume discounts as a separate item. This section will not be scored and is for informational purposes only.

5. Network Device Scoring

UTOPIA intends to award vendors with the best score between technical features, and costs. UTOPIA may choose to award multiple vendors or to no vendors. UTOPIA may also choose to award vendors based on optional features for limited use cases.

Each device role will be scored separately. This would mean it is possible for the same device to be scored differently depending which network role it is being scored on.

5.1. Scoring Weights

Scoring weights will be based on a scale of 1-100. 50 points available for technical features, 50 points available for costs. From the following examples, the scoring would break down as follows:

- Vendor A – 90 points
- Vendor B – 93.3 points
- Vendor C – 90 points

5.2. Technical Features (Pass/Fail)

UTOPIA will evaluate selected devices and test them for compliance with our network standards. While we make the best effort to disclose our requirements here, UTOPIA reserves the right to reject a device for not meeting requirements that may have been omitted. We will work with vendors to find info on features and the best way to make a device work with our deployment. If a device has stability issues during testing despite having the necessary features, the device may also be rejected for stability issues.

5.3. Cost Scoring

The scoring for costs will be based on the highest scoring vendor receiving the maximum score of 50 points. Each remaining vendor will receive a score based on the highest scoring

vendor's percentage. Note the following example.

- Vendor A scores 600 on cost – (80% of Vendor C's score) – 40 points
- Vendor B scores 700 on cost (93.3% of Vendor C's score) – 46.65 points
- Vendor C scores 750 on cost – 50 points

6. Optical Transceivers/Field Materials

UTOPIA is willing to evaluate optical transceiver vendors to provide a variety of transceivers for use on the network. Due to the number of optical vendors and the limited availability of UTOPIA staff, we will only evaluate submissions which are below the current UTOPIA optic purchase price.

6.1. MSA Support and Vendor Specific Coding

The vendor should have an optic that has generic coding applied but be able to provide optics with coding to support a specific vendor/device upon request.

6.2. Remote Recoding of Optics

The vendor must provide a tool to UTOPIA that allows for UTOPIA to field recode optics to a different vendor as necessary. The tool can also be used to provide troubleshooting and coding info. The vendor should include information on the tool and the accompanying software. Failure to include this info could lead to disqualification.

6.3. Optic Types

UTOPIA will be looking for the following types of optics from the vendor to purchase.

- 1Gbps (SFP)
  - Duplex 1310nm 10km SMF
  - Duplex 850nm MMF
  - BiDi 1490nm Tx/ 1310nm Rx 20km
  - BiDi 1310nm Tx/ 1490nm Rx 20km
  - CSFP BiDi 1490nm Tx/ 1310nm Rx 20km
    - This optic requires special coding to mimic a Nokia 7750 SR CSFP optic.
  - CWDM 20km/40km/80km/100km of all channels
  - Copper RJ-45
- 10Gbps (SFP+)
  - Duplex 10km 10km SMF
  - Duplex 850nm MMF
  - Duplex 40km SMF
  - Duplex 80km SMF
  - BiDi 1270nm TX / 1330nm Rx 10km, 20km, 40km, 60km, 80km, 100km
  - BiDi 1330nm TX / 1270nm Rx 10km, 20km, 40km 60km, 80km, 100km
  - BiDi 1490nm Tx / 1550nm Rx 80km, 100km
  - CWDM 20km/40km/80km/100km of all channels
  - Copper RJ-45
- 100Gbps (QSFP28, CFP, CFP2)
  - Duplex LR4 10km

    - Duplex ER4 40km
    - Duplex ZR4 80km
    - BiDi BX 10km, 20km, 30km
- 400Gbps (QSFP-DD)
    - Duplex LR8 10km
    - Duplex ZR4 30km

6.4. Field Materials

UTOPIA would also be interested in any pricing for these physical non-electronic devices.

- 18-channel CWDM panels
- Splice case sized CWDM panels
- Any other options the vendor may consider useful for fiber installations into huts or customer locations.

6.5. Pricing

Transceiver vendors should provide a price catalog for the above equipment. UTOPIA does not make any guarantee of volume for purchases. Volume discounts will be negotiated on individual purchases. If volume discount info is available for individual orders, please list that info separately.

6.6. DDM

All optics purchased by UTOPIA must include Digital Diagnostic Monitoring (DDM) to provide network electronics with information on the optic's performance.

6.7. Extended Temperature Range

UTOPIA would also like to see any additional pricing for extended temperature range optics in any of the above categories if the vendor offers them.

6.8. Testing

UTOPIA will review pricing responses from vendors. Due to the number of inquiries in the past, UTOPIA may select or not select a vendor to evaluate. Selected vendors will be asked to send optics from the above list to be tested. UTOPIA will run the optics on a throughput test for 2 days at maximum throughput to evaluate stability. Optics will also be placed into UTOPIA equipment and check for link state, light levels, or any issues with connectivity. UTOPIA utilizes equipment currently from Nokia 7210 and 7x50 lines, the Alcatel-Lucent Enterprise 6450 and 6570 lines, and Juniper's EX series.

6.9. References

Optic vendors should list no more than five references to existing customers who are willing to vouch for the vendors' performance and reliability.

6.10. Scoring

UTOPIA will evaluate vendors based on the following criteria, per optic type.

- Pricing – 80 points
    - 15% or more under current UTOPIA optic price – 80 points
    - 10% or more under current UTOPIA optic price – 40 points
    - 5% or more under current UTOPIA optic price – 20 points
    - Any other price point – 0 points
- Customer References – 20 points
- Stability and Compatibility – Pass/Fail
- This category is evaluated on a per optic type basis.

7. Terms and Conditions

7.1. Response Material Ownership

All material submitted regarding and in response to this RFP becomes the property of UTOPIA and will only be returned to the respondent at UTOPIA's option. Any person may petition to review responses after final selection has been made. UTOPIA has the right to use any or all system ideas presented in reply to this request, subject to limitations outlined below in "Proprietary Information." Disqualification of a respondent does not eliminate this right.

7.2. Proprietary Information

UTOPIA is subject to the disclosure requirements of the Government Records Access and Management Act ("GRAMA"), Title 63, Chapter 2, Utah Code Annotated. UTOPIA generally considers Agreements, Contract Documents, and all accompanying material to be public and subject to disclosure. A written claim of confidentiality and a concise written statement of reasons supporting the claim must accompany any material considered by respondents to be proprietary. Blanket claims that the entire Agreement or Contract Documents are confidential will be denied by UTOPIA. UTOPIA cannot guarantee that any information will be held confidential. Under Section 63G-2-304 of the Government Records Access and Management Act, if a respondent makes a claim of confidentiality, UTOPIA, upon receipt of a request for disclosure, will determine whether the material should be classified as public or protected, and will notify the respondent of such determination. UTOPIA agrees to hold all information classified as protected in confidence and protect it from public disclosure in accordance with such statutes to the greatest extent permitted by Utah law. UTOPIA may disclose such information to the extent required by law; however, UTOPIA shall provide respondents prompt notice of a request for disclosure of such protected information and shall cooperate with respondents in seeking the issuance of a protective order.

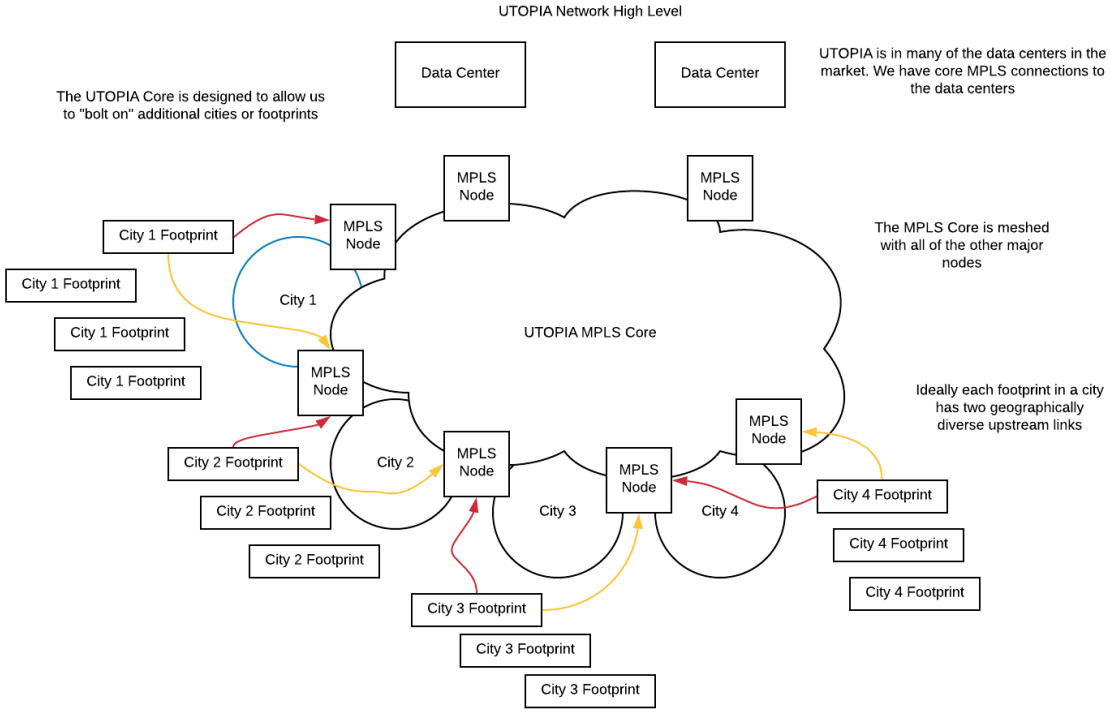
Respondents are entitled under the Government Records Access and Management Act to appeal an adverse determination regarding the classification of information. UTOPIA is not required to notify respondents of a request for non-protected information and will not consider a claim of confidentiality unless the respondent's claim of confidentiality is made on a timely basis and in accordance with the Government Records Access and Management Act.

7.3. Conflicts of Interest

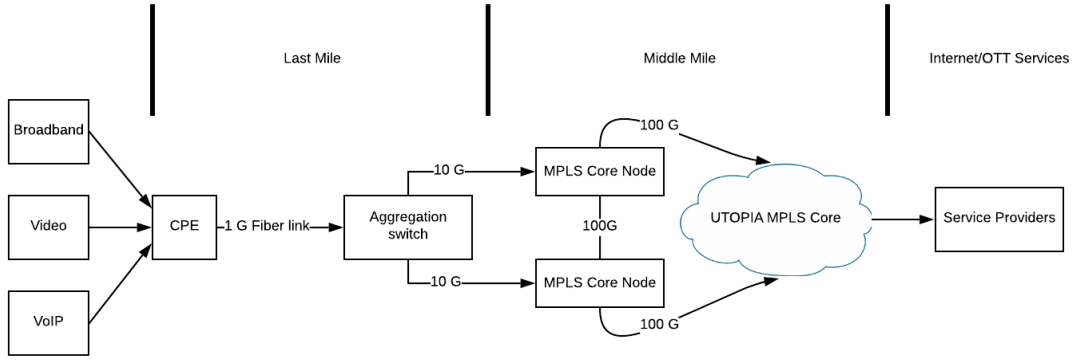
Proposed solutions to this RFP must be defined in such a way as to prevent and prohibit conflict of interest between the respondent, UTOPIA, and all potential service providers that may offer services across the UTOPIA network. Specifically, respondents must avow that they have no intention of offering services across the UTOPIA network, either in the short term or at any point in the future, or they must acknowledge their intent. Furthermore, respondents must disclose any relationships, either formal or informal, with companies that may at any time offer competitive retail services across the network.

If respondents intend to offer competitive retail services at any point across the UTOPIA network, you must provide a complete explanation of how your proposed solution to this RFP does not advantage you in any way over potential competitors. Failure to do so will result in your permanent disqualification from offering competitive retail services across the UTOPIA network.

8. Appendix A – UTOPIA High Level Diagram



9. Appendix B – Role Overview



Each customer has a dedicated fiber link to upstream switch. Services are delivered by service provider specific VLANs

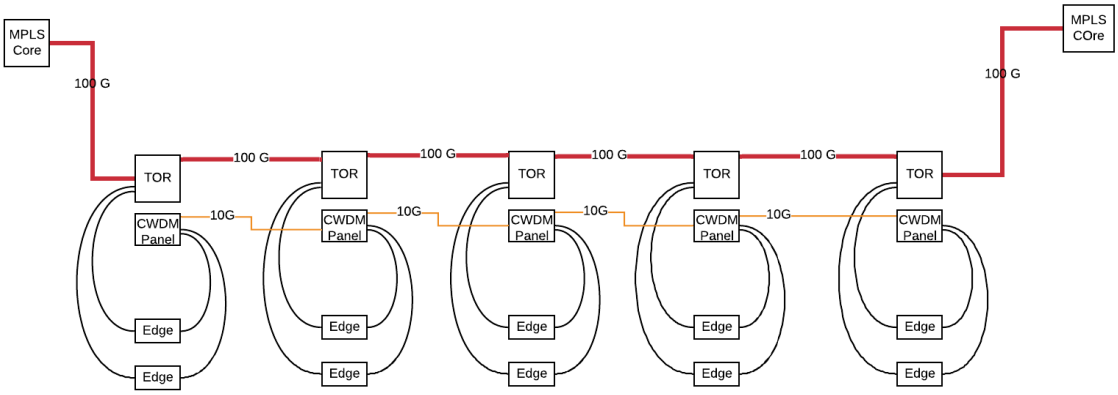
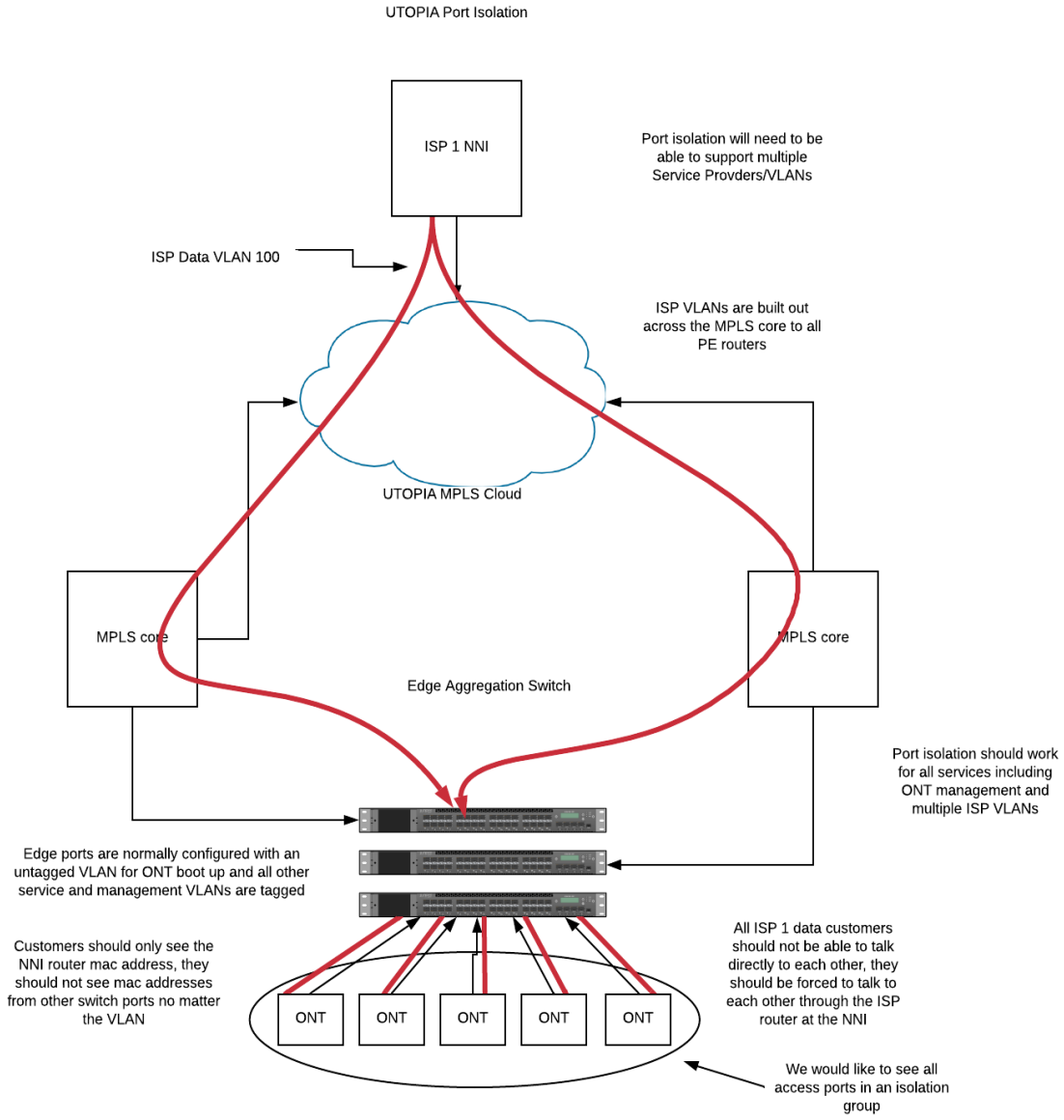
Aggregation switches have uplinks in LACP groups or MPLS interfaces allowing easy capacity upgrades. These are usually configured in an active/standby configuration. Additional switches can be added with their own dedicated uplink fibers to address increased subscriber take rates.

The IP/MPLS core is built with 100 G core links either with dedicated fiber between the nodes or with DWDM optical transport technologies to allow addtional 100 G waves to be added between nodes

10. Appendix C – 100G Top of Rack Switch Use Case

UTOPIA Top of Rack Switch Use case

Each footprint will have a 100G top of rack (TOR) switch with each edge switch having an uplink to the TOR switch. These edge switch connections will be 10G. The edge switch stacks will also have a link through CWDM panels to the next available TOR. There should also be limited capacity for 10G customers to connect directly to the TOR switch.



11. Appendix D – Port Isolation Overview