

Wholesale Internet Service Provider (ISP) Services

Request for Information

Lyndon Township Broadband Implementation Committee
Lyndon Township, Michigan

Responses must be emailed to:

Lyndon Township
17751 N. Territorial Road, Chelsea, MI 48118
clerkatlyndon@gmail.com

Proposals are due by 12:00 pm EST on Thursday, March 29, 2018

Dated: March 6, 2018

1 Introduction

The Township of Lyndon, Michigan ("Owner" or "Township") is a general law township in Washtenaw County, Michigan.

The Township of Lyndon, is preparing to install a Fiber-to-the-Premise (FTTP) broadband communication system capable of meeting long-term residential, commercial, industrial and civic needs in our community.

The installation of a modern and robust technology infrastructure will enable the Township to provide its residents and businesses with state-of-the art services such as high-speed Internet access as well as other high-tech communication offerings.

The Township is financing the system through bonds backed by a millage.

The entity described as Township/Authority within this Request for Information ("RFI") will be the entity with which the Wholesale ISP would contract with for services described within this RFI. It is unknown at this point whether the public entity that will contract with the Wholesale ISP will be the single township of Lyndon, an authority made up of representatives from several townships or some other entity.

2 Overview

This project began in 2013 with the creation of the Western Washtenaw Broadband Group. This group met to define broadband issues and to make recommendations on broadband issues. In 2016 the Township funded a feasibility study which outlined costs, assets and tasks associated with launching a fiber system in the community.

In August of 2017 there was a referendum asking voters to approve the construction of a fiber to the home system within the Township and to use tax revenue to secure and guarantee payment for the system. The referendum passed with a 66% approval. With the passage of the referendum, the Township desires to have the system constructed and operational by the end of 2018.

The Township is now inviting interested and qualified Internet Service Providers (ISPs) to provide information regarding Wholesale IP and ISP services to Township/Authority.

- At the time of the pre-engineering study (early 2016), the Township had:
 - 1,158 passings in the Township
 - Approximately 65 miles of fiber plant required to pass all passings
 - Fiber construction expected along approximately 63 miles of roads.
 - Planned a Gigabit Passive Optical Network (GPON) network architecture
 - Used a 1X32 split ratio
 - Estimated 5 splitter sites

3 Wholesale ISP RFI Objective

The Township seeks information from qualified ISPs interested in providing wholesale IP and ISP services to the Township/Authority. The parameters associated with this RFI are as follows:

1. The FTTP network will be owned by the Township and the operation and maintenance of this network will be the financial responsibility of the Township.
2. Township/Authority will offer retail Internet service and potentially other services over this FTTP network.
3. Township/Authority is seeking information from qualified and interested ISPs who are willing and able to contract with Township/Authority to perform wholesale ISP functions enabling Township/Authority to augment functions and service elements being provided by Township/authority and offer a retail broadband service to subscribers within the reach of the FTTP network.
4. The Township expects to purchase these ISP functions from the wholesale ISP, to combine those functions with those being provided by the Township/Authority and offer a retail ISP service to community members over the FTTP network.
5. Township/Authority expects to offer high-speed internet access to subscribers of such service within the reach of the FTTP network.
6. Township/Authority expects to leverage the assets of the FTTP Network and electronics being funded by bonds backed by a millage in order to offer High-Speed internet access at a lower-than-market price.

4 Elements Owned & Being Provided by Township / Authority

Elements owned by and being provided by the Township/Authority are as follows:

1. FTTP Passive Optical Network (PON) network passing all homes, businesses and governmental structures in the Township
2. Network Access Points (NAPs) for drop access to customer premises
3. Splitters in the Local Convergence Point (LCP) cabinets
4. Fiber Drops to the subscriber premise
 - i. Township/Authority will contract for placement of these drops
5. PON Optical Line Terminal (OLT) chassis and optics gear
6. Environmentally conditioned hut/cabinet housing the OLT and other gear
7. Customer Premise Optical Network Terminal electronics (ONT) at a customer premise
 - i. Township/Authority will contract for installation and premise wiring
8. Backbone fiber connectivity from the Township border to the OLT site
9. Element Management System (EMS) software for provisioning, management and monitoring of electronics within the Township/Authority network
10. As-built fiber allocation and splice records

5 Elements & Services Being Requested From Wholesale ISP

Elements and Services being requested from the Wholesale ISP are as follows:

1. Fiber connectivity from the Township border to the ISP
 - a. Transport from the Township to the ISP core network
 - b. Any electronics needed at the Township OLT location to facilitate, maintain or monitor IP backbone service and transport
2. IP Backbone connectivity in sufficient capacity to provide a high-quality user experience for all levels of Internet Access speeds being offered by the Township/Authority
3. Customer Billing and collection services – including all taxes, fees and surcharges required as part of regulatory requirements
4. Customer onboarding and subscriber activation
5. Service provisioning to customers
6. Host a Township/Authority website/landing page with service information and pricing
7. Network monitoring and Network Operations Center (NOC) services
8. Notifications of service interruptions
9. Support multiple tiers of Internet Access service
10. Support symmetrical Internet Access services
11. Support up to 1 Gbps internet Access service
12. Support unlimited bandwidth – No Data Caps
13. Support Network Neutrality Principles
14. Support and provide Communications Assistance for Law Enforcement Act of 1994 (CALEA) requirements
15. Provide IP addresses
 - a. Dynamic
 - b. Static
 - c. v4/v6
16. Customer support services – 24 hour service via telephone and on-line
17. Maintain fiber allocation and usage records and provide access to these records to Township/Authority
18. Manage maintenance of FTTP electronics
 - a. OLT software upgrades
 - b. OLT Hardware replacements
 - c. Customer Premise Equipment (CPE) software upgrades
 - d. CPE hardware replacements
19. Coordinate MISS DIG requests
20. Physical network management and maintenance – manage subcontractors for fiber cuts, etc.
21. Customer drop installation contract services
22. Customer equipment installation contract services

As described in the Pricing section below, the Township expects that Services listed as 1 through 17 in this Section will be provided on a Monthly Per-Subscriber basis. Services listed as numbers 18, 19 and 20 in this section are expected to be contracted on a yearly basis. Services listed as numbers 21 and 22 are expected to be contracted on a per incident basis. If some of the services listed under an expected yearly contract basis are

better served as a per-incident basis, the Township is open to suggestions as to why a per-incident basis may better serve the Township/Authority.

6 Questions to Wholesale ISP

1. Discuss your use of Carrier Grade Network Address Translation (CGNAT).
2. Discuss IP Backbone Oversubscription guidelines.
3. Discuss CALEA capabilities and processes.
4. Discuss the potential of providing additional services over the FTTP network.
5. Discuss your marketing capabilities.
6. Discuss your customer drop processes.
 - a. Do you use contractors – or – do you do this yourself?
7. Discuss your security features.
8. Discuss any malware services and features that you provide.
9. Discuss your privacy principles.
10. Discuss how email services are provided over your network.
11. Discuss and describe all services that you currently offer over your own network.
 - a. Internet Access
 - b. Voice
 - c. Video
 - i. IPTV
 - ii. CATV
 - iii. OTT
 - iv. Etc.
 - d. Home security
 - e. Etc.
12. Provide the rates schedule of services currently offered over your own network.
 - a. Internet only
 - b. A la carte services
 - c. Bundled services
13. Discuss your FTTP GPON network experience and capabilities.
14. Provide a brief description of your Company's experience and competency in delivering high quality telecommunications services to end-users.
15. Describe your Company's technical infrastructure used to develop and distribute end-user services to its customers. Does your Company operate a centralized technical operations facility, or does it use distributed, stand-alone operation centers in each of the communities it serves?
16. Does your Company provide services over FTTP networks? If so, what type of network access platform is typically used by your Company (PON vs. Active Ethernet)? Which vendor equipment does your Company use, including model types?
17. Provide estimated OLT and ONT costs that you currently use in your network.
18. Describe your Company's network monitoring capabilities and trouble response/resolution protocols.
19. How does your Company dispatch and track customer trouble calls?
20. Does your Company operate its own telephone switches? If so, indicate the vendor(s) and the model types used. If not, indicate the wholesale provider used.

21. Describe the capabilities of your telephone switches (if any) used in terms of capacity, redundancy, features available, etc.
22. How does your Company handle Internet backhaul, and to which peering centers are the backhaul circuits routed?
23. Describe your Company's field service organization and how it functions to respond to customer service requests.
24. How does your Company provision new customer orders and service changes?
25. Does your Company provide service level guarantees to its customers? Describe your Company's Service Level Agreements (SLA) to guarantee quality of service and bandwidth speeds. Township expects a very high level of service quality and for customers to consistently receive their committed service levels.
26. Describe your Company's technical help desk, listing hours of availability, location, and levels of support available (Tier1, Tier 2, etc.). A call center/help desk within the United States of America is a requirement.
27. Describe your Company's customer billing procedures in terms of the following:
 - a. Billing forms (electronic, paper, etc.)
 - b. Auto-payment
 - c. Advance or arrears billing
 - d. Billing periods – first of month or billing cycles throughout month
 - e. Payment due dates and delinquency schedule
 - f. Disconnection and reconnection procedures
 - g. Credit check and deposit policy
 - h. Billing file format for potential output to Township/Authority billing system
28. Provide a sample customer bill(s) reflecting Internet, telephone, and private data circuits, with sensitive customer information redacted.
29. Provide samples of customer collateral materials that relate to customer and billing policies.
30. Describe your Company's proposed backhaul facilities for its Township operation:
 - a. Initial size of backhaul circuit
 - b. Over-subscription ratio per service Mbps, sufficiently low to deliver guaranteed bandwidth subscription levels.
 - c. Internet peering locations
 - d. Backhaul route redundancy – if any
31. Describe how your Company would monitor network performance of Township network facilities.
32. Outline how your Company responds to network events and customer trouble calls, including trouble ticketing, on call scheduling, dispatch procedures, escalation protocols, estimated response time windows, etc.
33. Describe your Company's installation process and procedures from the point of issuance of an installation service order to turn-up, testing, and customer approval.
34. Provide an estimate of the labor and materials cost (excluding ONT) for your Company to plow in a replacement underground fiber drop.
35. Describe how you handle a MISS DIG request for location requests.
36. Describe your process for identifying, responding to, managing and resolving feeder and distribution network outages. Who is dispatched and in what timeframe?
37. What type of split ratio do you currently use in your own network?
38. Describe the splitter architecture (LCP or not) in your own network.

7 Relationship Between Wholesale ISP and Township / Authority

The relationship between Township/Authority will be a vendor relationship that will be governed by a service contract or several service contracts between the ISP (Seller of Services) and Township/Authority (Purchaser of Services). The relationship is expected to be similar to a wholesaler / retailer relationship where the Township is purchasing certain elements and capabilities from the ISP wholesaler and combining those elements and services with those provided by Township/Authority to offer a complete Internet Access service. The services offered by the wholesale ISP will position the ISP as that of an "underlying" ISP for services offered to subscribers. All bills to subscribers will be rendered as Township/Authority and proceeds from these collections will be used to pay the wholesaler ISP. The wholesaler ISP shall maintain all licenses, permits and regulatory authorities required for it to provide the services and elements listed above as an Internet Service Provider or as any other Service Provider required to provide the services offered on a wholesale basis to Township/Authority.

Although it is implied in the requests and descriptions in this RFI, it should be noted that the Township/Authority is requesting information regarding Wholesale ISP services as well as network management and maintenance services and customer installation services. The Township/Authority does not expect to employ personnel and provide equipment required to maintain the FTTP network or perform actual customer installations. The Township/Authority may contract with the Wholesale ISP responding to this RFI to perform these tasks on the Township/Authority's behalf. The Township may also send a Request for Proposals for interested bidders.

8 RFI Response Requirements

8.1 Submittal of Exhibit I

The Owner is requiring an intent-to-respond reply from each Provider that intends to respond to this RFI. Please complete the Exhibit I below and return it as soon as possible after receipt of the RFI to:

Derrel Duplechin
VP Engineering, CCG consulting
dduplechin@ccgcomm.com
(337) 654-7490

8.2 Letter of Transmittal

When the Provider submits an RFI response, please provide a one-page or two-page transmittal letter with the following:

- A brief statement explaining that the respondent understands the project; this should be no more than 2 pages.
- Highlights of the Provider's qualifications and ability to perform the project services;

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- The name, title, phone number, fax number, e-mail address, and street address of the person in the Provider's organization who will respond to questions about the RFI.

8.3 Executive Summary

Provide an executive summary (no more than 2 pages) with the following:

- Why the Owner should consider the Provider to provide wholesale ISP services;
- Advantages of the Provider's solution;
- Synopsis of the Provider's solution specific to this RFI.

8.4 Provider Information

8.4.1 Company Overview

Provide an overview including the following information about the Provider:

- Company name, date established, number of employees, business address, phone number, fax number, e-mail address;
- Brief statement of the Provider's background, demonstrating longevity and financial stability;
- Strategic partnerships;
- Lines of business conducted by the Provider;
- Description of any recent mergers or acquisitions.

8.4.2 Financial Viability

Please provide information as to the financial viability and stability of the Provider. How long has the Provider been in business? Provide financial statements or other verification for the most recent fiscal year.

8.5 A point-by-point response to sections 3 through 7

8.6 Completion of Section 9 below.

8.7 RFI Submission

- **Deadline**

RFI responses must be received no later than 12:00 P.M. EST on March 29, 2018. All RFIs must be clearly marked "Wholesale ISP Services RFI".

- **RFI Deliverables**

One (1) electronic copy in Adobe Portable Document Format (PDF) of the RFI response must be delivered to the following

Submit responses to:

Township Clerk
17751 N. Territorial Rd.,
Chelsea, Michigan 48118
clerkatlyndon@gmail.com
(734) 475-2401

- **RFI Questions**

All questions pertaining to this RFI must be submitted in writing by email to:

Derrel Duplechin
VP Engineering, CCG consulting
dduplechin@ccgcomm.com
(337) 654-7490

9 Pricing

The respondent to this RFI should provide **TARGET** pricing on the basis described below that will be billed to the Township/Authority for described services.

9.1 Pricing on a Monthly Recurring Cost (MRC) **per subscriber basis** should be all inclusive and include all elements shown in Section-5 numbers 1 through 17 above for the following Internet Access rates

9.1.1 100 Mbps MRC Price per Subscriber \$ _____

9.1.2 1,000 Mbps MRC Price per Subscriber \$ _____

9.2 Pricing on a **yearly contract basis** for numbers 18, 19 and 20 in Section-5 above

9.2.1 Manage maintenance of FTTP electronics \$ _____

9.2.2 Coordinate MISS DIG \$ _____

9.2.3 Physical network management and maintenance \$ _____

9.3 Pricing on a **per incident basis** for numbers 21 and 22 in Section-5 above

9.3.1 Customer drop installation contract services \$ _____

9.3.2 Customer equipment installation contract services \$ _____

10 Miscellaneous

The Township has no obligation to proceed or act upon any response to this RFI. This is not a solicitation for offers, bids or proposals. The Township may elect to proceed in a manner wholly different than as described in this RFI. All responses shall become the property of the Township, which may use the information in a response for its own purposes.

All Providers must disclose any potential conflict of interest with the Township, any of its employees or its consultants.

Each Provider shall hold all information provided in its response in confidence and shall not reveal its response to or discuss its response with others. By the submission of a response, the submitting Provider represents and warrants that in connection with the response:

1. The prices or other information stated in the response has been arrived at independently, without consultation, communication or agreement with any other Provider for the purpose of restricting competition;
2. The prices or other information stated in the response have not knowingly been disclosed by the Provider and shall not knowingly be disclosed by the Provider prior to the award of any contracts.
3. No attempt has been made nor will be made by the Provider for the purpose of restricting competition, to induce any other person or Provider to submit, or conspire with any other parties to restrict or otherwise manipulate prices or competition relating to this RFI or any resultant contracts.

The Township does not and shall not discriminate on the basis of race, color, religion (creed), gender, gender expression, age, national origin (ancestry), disability, marital status, sexual orientation, or military status, in any of its activities or operations. These activities include, but are not limited to, hiring and firing of staff, selection of volunteers and vendors, and provision of services. The Township is committed to providing an inclusive and welcoming environment for all members of our staff, citizens, volunteers, contractors, vendors and clients. The Township expects the Provider to comply with these standards.

11 Confidentiality

The Township shall use reasonable efforts to preserve the confidentiality of any proprietary or confidential information submitted by the Provider which is clearly designated as such by the Provider. Given that the Township is a governmental entity, it has commitments and obligations subject to "freedom of information" laws or similar statutory disclosure requirements. The Township is subject to full compliance with these laws and statutory requirements. Compliance with these laws and statutes shall be deemed not to constitute a breach of requested confidentiality of a given response.

Exhibit I

Acknowledgement of RFI and Intent to Respond

You must complete this form if you wish to be notified of the responses to any questions asked by potential Proposers.

Please complete this page and return via email to:

Derrel Duplechin
VP Engineering, CCG Consulting
Email: dduplechin@ccgcomm.com

I _____
(Authorized Individual)

Representing _____
(Company Name)

have received The Owner's Request for Proposal for the Design and Construction Management of the planned FTTP network for Lyndon Township, MI.

Please send my Company the responses to any questions posed by potential Proposers to:

_____ Name

_____ Email address