Project Technical Plan and Evidence Submission for Fiber-to-the-Premises (FTTP) Service: Template Instructions and Schema

This document is intended to guide BEAD applicants in completing the **Fiber-to-the-Premises (FTTP) Service Template**. The evidence is required to demonstrate the applicant has taken the steps necessary to ensure compliance with technical requirements as established in the NTIA's BEAD Restructuring Policy Notice (issued June 6, 2025).

FTTP Service Template Submission Instructions

1. Refer to the schema below for detailed instructions on how to complete each tab and its associated fields. All fields are required unless otherwise stated.
2. Save your completed FTTP Service Template with the following file name format: <<CompanyName>>_FTTPEvidence_<<yyyy-mm-dd>>.xlsx.
3. For applications proposing to use multiple technology types in the network (e.g., fiber and licensed fixed wireless), please upload a template for each technology type used.

FTTP Service Template Schema

The Fiber-to-the-Premises (FTTP) Service Template contains five tabs:

Tab number	Description
1	Logical network diagram
2	Access layer
3	Reliability & quality of service
4	Performance calculations
5	Low Cost Service Option

Information must be entered for all fields in Tabs 1 – 5. All supplemental evidence files and documents must be submitted with the completed FTTP Service Evidence template.

Tab 1. Logical Network Diagram Tab

Field	Data type	Example	Description	Constraints
Logical Network Diagram	Image	Diagram	Provide a logical diagram showing backhaul between the Internet and central office (CO) / headend location(s); active optical distribution network components (i.e. Optical Line Terminals, or OLTs);	Illustrate a worst-case scenario for link capacities, FTTP technology type (GPON, XGS-PON, Active Ethernet, etc.), splitter ratios (where applicable), and

Field	Data type	Example	Description	Constraints
			passive optical components, including splitters (if applicable); and customer premises equipment (CPE), including the optical network unit (ONU) and/or customer gateway device	number of subscribers served per OLT port

Tab 2. Access Layer Tab

Field	Data type	Example	Description
Describe the access layer FTTP technology that will be used (e.g., GPON, XGS-PON, Active Ethernet). Include the reasoning for this selection based on the density and characteristics of the project area.	Narrative		

Tab 3. Reliability & Quality of Service Tab

Field	Data type	Example	Description
4.1: Performance Thresholds			
How does the applicant monitor and ensure that roundtrip latency, real-time packet loss, and jitter remain within the following thresholds during typical and peak operating conditions?	Narrative	Latency: ≤ 100 ms Packet loss: ≤ 2% over any 15-second interval Jitter: ≤ 30 ms over any 15-second interval	

Tab 4. Performance Calculations Tab

Field	Data type	Example	Description
Demonstration of Capacity			
Using worst-case design assumptions, please provide calculations demonstrating that the network can provide	Narrative		Calculations should be for the proposed design specific to the BSLs and all network components encompassed the application.

Field	Data type	Example	Description
to each location at the time of activation: **(1) A minimum of 100 Mbps download and 20 Mbps upload** **(2) ≤ 100 ms roundtrip latency** **(3) Simultaneous 5 Mbps to all connected locations, including BEAD and non-BEAD users**			Please include the following in your calculations: 1. Existing network components upon which the application is dependent 2. A summary of the assumptions used for demand modeling 3. Oversubscription ratios 4. Description of shared segments and subscriber counts for these shared segments
Demonstration of Scalability			
Please demonstrate, using calculations based on the submitted technical information, how the proposed network will meet the following performance targets five years after initial deployment, assuming a 25% annual increase in capacity demand: **(1) Provide at least 240 Mbps download and 48 Mbps upload capacity to each Broadband Serviceable Location (BSL)** **(2) Maintain roundtrip latency no greater than 100 ms under projected peak load (BEAD and non-BEAD users)** (3) **Simultaneous 12 Mbps to all connected locations, including BEAD and non-BEAD users**	Narrative		Please include the following in your calculations: 1. Existing and future network components upon which the application is dependent 2. Oversubscription ratios 3. Number of anticipated subscribers that will utilize shared capacity along any segment of the network as of the activation date Calculations should be for the proposed design specific to the BSLs and all network components encompassed by the application.

Field	Data type	Example	Description
Demonstration of Support for 5G and Advanced Services			
Please demonstrate, using calculations based on the submitted technical information, how the proposed network will support deployment of 5G, successor wireless technologies, and other advanced services. For the purpose of this demonstration, calculations should be based on one of the following two scenarios: **(1) Rural capacity backhaul to one provider at each of three locations, or** **(2) (2) Three separate providers at one location each**	Narrative		The calculations must demonstrate that the following performance targets can be met: 1. Deliver at least 300 Mbps download and 30 Mbps upload capacity to each of three distinct locations within the proposed project area (totaling 900/90 Mbps aggregate capacity) 2. Maintain roundtrip latency no greater than 100 ms on each of these links Your response must include: 1. FTTP network capacity allocation 2. Configuration of OLTs and last-mile components 3. Backhaul link capacity, including BEAD and non-BEAD traffic 4. Any assumptions made about concurrent usage

Tab 5. Low Cost Service Option (LCSO)

Field	Data type	Example	Description
Describe the Low-Cost Service Option the applicant will provide as required by the BEAD Program. What technology type, speeds and latency will be offered under this plan, and at what price?	Narrative		
Is the Low-Cost Service Option described above an existing low-cost plan offered by the applicant or will this be a new plan developed primarily to meet this BEAD obligation?	Narrative		
If the applicant expects to change the price for the LCSO over the 10-year federal interest period or period of performance, explain the methodology for potential changes.	Narrative		