

## Establish and Maintain Account Key Network and Service

## **Decisions**

## **Network**

## **Network Facility Decisions**

Determining which facilities a CLEC provides and which Fidium Fiber (or other provider) facilities the CLEC will use to provide is a key driver not only of CLEC business decisions, but also of the process for becoming a CLEC in the Fidium region. The steps CLECs take to interconnect with the Fidium Fiber network depends heavily on network facility decisions made by the CLEC. The following examples provide four illustrative strategies for providing local service. For detailed product/service information and ordering information, please refer to the Fidium Wholesale Web Site at: <a href="https://www.fidiumwholesale.com">https://www.fidiumwholesale.com</a>

CLEC Facility	Switch		CLEC Interaction with Fidium
Strategy	Fidium	CLEC	Fiber
No Facilities "Resale"	X		Purchases retail telecommunications services at a wholesale discount
Partial/"No" Facilities	X		<ul> <li>Purchases loops and local switching</li> <li>Collocates in Fidium Fiber central offices (Partial Facilities)</li> <li>Combines network elements</li> <li>Or, purchases UNE Platform</li> </ul>
Partial Facilities		X	<ul> <li>Purchases unbundled loops or unbundled switching</li> <li>Collocates in Fidium Fiber central offices</li> <li>Combines network elements</li> <li>Interconnects a switch with Fidium Fiber network</li> <li>Or purchases UNE combinations such as Enhanced Extended Links and Expanded Dedicated Trunk Port</li> </ul>
Facilities Based		Х	<ul> <li>CLEC owns switch and local loop</li> <li>Interconnects with Fidium Fiber network</li> <li>Originates and terminates traffic to and from Fidium Fiber</li> </ul>



A CLEC may elect different strategies. However, the complexity of decisions regarding interconnection and products are far greater than illustrated — these simple examples illustrate the most basic business decisions regarding facilities and interconnection.

Aspects of the network design are important to understand when determining the type of CLEC arrangements to implement, which include, but are not limited to:

- 1. A preliminary design of the mutually agreed upon network interconnection.
- 2. Forecasts of volumes (interconnection and Unbundled Network Elements).
- 3. Operator Services and Directory Assistance platform.
- 4. Types of signaling used (e.g., Signaling System 7 (SS7), multi-frequency).
- 5. Understanding of which Local Access Transport Area (LATA) the CLEC is serving.
- 6. Understanding of 911/E911 requirements.
- 7. Collocation arrangements.
- 8. Switching and routing plans.
- 9. Establishing a point of interconnection.