

Telecom Solutions

FIBER OPTIC & WIRELESS



Adesta specializes in the design and implementation of modern communications networks and infrastructure for public and private customers and government entities. As a trusted provider of facilities, equipment and personnel for a wide variety of communications infrastructure, Adesta offers custom tailored, results-oriented design build services in OSP and ISP fiber optic construction SONET, IP/Ethernet, DWDM/CWDM, wireless, last mile and broadband networks.

HISTORY

Adesta began in the late 1980s designing and constructing some of the first fiber networks in the country. Early on we constructed over 3,000 miles of fiber in the State of Iowa and 680 miles of fiber for Commonwealth Edison. To date, Adesta has deployed over 200 successful networks and more than 2 million fiber miles in both rural and metropolitan areas.

Adesta has a long history of developing converged solutions for a variety of customers from telecom carriers, service providers to state and local government agencies, authorities and DOTs. The telecommunications industry has evolved continuously since the deregulation of the industry with the Telecommunications Act of 1996. On the heels of the Act, Adesta was a leader in developing shared use long haul networks with right of way owners such as toll highway authorities and telecom carriers.

As the market has evolved Adesta remained in the vanguard designing and constructing middle mile, last mile and FTTH networks for public entities, such as state and local government agencies, and private customers such telecom service providers, wireless carriers and public utilities.

CAPABILITIES

We can help develop a green-field network or integrate into an existing infrastructure. We work with both inside and outside plant facilities and provide all types of networks for voice, data

and video applications. Our wide variety of services includes design, engineering, cable and equipment procurement, aerial and underground installation, facility construction, system testing and turn-up, fusion splicing and documentation.

Middle Mile

Middle Mile infrastructure is essential for bringing broadband to communities that were previously isolated or had only rudimentary connections. Once in place, many of these networks deliver a heightened level of security and safety by providing interoperability between first responders and/or enhancing communications capabilities by connecting state and local government agencies via one network.

Last Mile

Last Mile is the final leg of a network that delivers connectivity from a communications provider to a customer premise. Adesta provides services to both the wireless and wired subsets of these market segments. In the wired subset, we focus on the fiber to the Home (or premise) group. In the wireless arena, mobile backhaul network development is necessary for cellular operators to deploy 4G/LTE and future 5G services that require a robust network to meet high bandwidth needs. We are experienced at engineering, integrating, installing and maintaining the wired and wireless backhaul architectures being deployed to meet these needs.

Smart Grid

Smart Grid deployments require a telecommunications network backbone that will provide "intelligence" to the energy sector, providing the ability to better manage electrical consumption and alerting potential black-outs and brown-outs resulting from utility grid stress. Adesta is capable of providing network development services for these networks. With the recent advent of government funding available for Broadband and Smart Grid network development, coupled with our deep history of



comprehensive deployment of comprehensive network design/build solutions, Adesta is well suited to take the lead role in this marketplace.

SERVICES

Adesta offers a full suite of design, construction and maintenance services for long haul, middle mile, last mile (FTTx) and wireless networks including:

- Full Turnkey Deployments
- Route Design, Design & Engineering
- Permitting
- Aerial Construction
- Underground Construction (Trenching, Plowing & Direction boring)
- Equipment Design, Installation, Turn-up & Testing
- Preventive Maintenance
- Emergency Restoration
- Utility Locating

WIRELESS NETWORK PROJECTS

- Distributed Antenna Systems (DAS)
- Small Cell
- Build to Suit Towers
- Cellular
- WiFi
- WiMax
- Microwave