

DASAN Zhone Solutions technology provides high-speed Internet services to 10 million APSFL subscribers in India

Summary

Customer:

- Andhra Pradesh State Fibernet Limited (APSFL)

Situation Analysis:

- The state of Andhra Pradesh in India has a population of 60 million people
- In 2016, the government announced a plan to provide triple-play services to at least 10 million subscribers by 2018
- The existing growth in the region could not be supported by the current infrastructure

Solution:

- A customized FTTH GPON solution from DZS that is cost-effective, delivers high-speed Internet services and has robust bandwidth capabilities

Benefits:

- DZS Optical Network Terminal (ONT) equipment is compatible with APSFL's existing Cisco Optical Line Terminal (OLT) equipment
- The DZS FTTH solution can be customized to work with a unique 1GE and 1FE interface, a capability APSFL required.

Results:

- APSFL can now support up to 10 million subscribers on the DZS GPON platform
- Communities in Andhra Pradesh have access to triple-play services, including telephone and IPTV
- A network that operates with existing equipment, which saved APSFL resources

Background and Challenges

APSFL is a fully-owned entity of the government of Andhra Pradesh under the control of the Energy, Infrastructure & Investment (E,I&I) department. This corporation is responsible for the state's Fiber Grid – an initiative that seeks to deliver high-quality and affordable digital services (data, voice and video) to households, government offices and private agencies in the state.

In order to deliver on-demand, affordable and end-to-end broadband connectivity, APSFL set out to find a GPON solution that would provide triple-play services to at least 10 million subscribers by 2018. The infrastructure also needed to support 10 to 20 Megabits per second

(Mbps) to all households and one to 10 Gigabits per second (Gbps) to all institutions and multi-unit buildings.

Evaluation Process

DASAN Zhone Solutions (DZS) was one of eight vendors that submitted an RFP for the project.

The DZS team presented a strong Proof of Concept (PoC) to the APSFL review committee, outlining a plan for the network infrastructure and how DZS technologies could support the robust network required by the state.

DZS was selected to provide GPON services for APSFL customers in October 2016 based on the company's ability to provide the most scalable, cost-effective solution.

Solutions and Benefits

Fiber-to-the-Home (FTTH) GPON has enabled APSFL to deliver triple-play services (data, video and voice) to its subscribers. When using a single shared optical fiber, GPON delivers high-speed Internet to multiple users over long distances, and eliminates the use of several heavy and expensive switches.

FTTH GPON was the ideal solution to provide triple-play services to communities in Andhra Pradesh because it provided higher bandwidth than the previous infrastructure

The following DZS products were deployed based on the specifications of the network:

- H662V ONT – This ONT is designed for subscribers who need multiple POTS and high-speed connection indoors.
- H660GW ONT – This ONT helps deliver triple-play services to subscribers in FTTH applications.

Results

DZS products offered APSFL the versatility it needed to support and adapt to its current infrastructure, particularly in high-density urban areas. Plus, the DZS GPON technologies is compatible with the existing Cisco GPON OLT that was already integrated in the Internet network.

With 26 million households in the state, FTTH services are vital to deliver and maintain Internet connections for residents and businesses. Since the deployment concluded in January 2017, the India broadband market capabilities have grown exponentially with DZS solutions in place.

All households that are subscribed to the network now have access to at least 10Mbps, and businesses are receiving 100Mbps.

The APSFL GPON solution now supports many cities across the state, and the state has experienced an increase of GPON subscribers. In addition, the rate of disconnection has been reduced significantly after just eight months.

About DASAN Zhone Solutions

DASAN Zhone Solutions, Inc. (NASDAQ: DZSI) is a global leader in network access solutions for service provider and enterprise networks. The company provides a wide array of reliable, cost-effective networking technologies—including broadband access, Ethernet switching, Passive Optical LAN, and software-defined networks—to a diverse customer base that includes more than 1,000 of the world's most innovative customers in more than 50 countries worldwide. DZS is headquartered in Oakland, California.

“With a population of 60 million people in our state alone, there is major demand for on-demand Internet connectivity. The solutions from DZS have enabled us to deliver the high-speed services residents need. In addition, the technologies were cost effective and adaptable to our current infrastructure. Andhra Pradesh now has a robust FTTH network that can support homes and businesses now, and be expanded as the population grows.”

- Mr. Hari Krishna, Commercial Executive Director, APSFL