

TPG Telecom Limited's wholly-owned subsidiary PIPE Networks Pty Limited (PIPE) and Infinera announced the selection of the Infinera DTN-X platform for PIPE's submarine cable system, PPC-1. PIPE is deploying FlexCoherent super-channels on PPC-1 with the Infinera DTN-X platform, offering International and Australian carriers increased speed and highly resilient services. This marks the first deployment of optical super-channels in the Asia-Pacific region.

In addition to the submarine deployment, the Infinera DTN-X platform was also selected for the company's terrestrial network delivering 500 Gigabit per second (Gb/s) FlexCoherent super-channels to multiple, strategic data centers located in Sydney. The platform supports 8 Terabits per second (T/bs) on a single fiber, which will significantly increase the capacity, scalability and resiliency of PIPE's extensive metro fiber network in Sydney.

The use of the DTN-X platform on PPC-1 opens PIPE up to significantly increased capacity on PPC-1, delivering in excess of 3 Tb/s. It will also allow PIPE to deploy Infinera's 100 Gb/s coherent wavelengths using high capacity super-channel transmission for the first time in the Asia-Pacific region.

After a detailed multi-vendor evaluation process, PIPE selected the Infinera DTN-X platform for the scalability, efficiency and simplicity it brings to its network. The Infinera DTN-X platform helps PIPE address the increasing demand for submarine and terrestrial bandwidth.

FlexCoherent super-channels enable PIPE to optimize transmission performance across a range of applications using multiple software-programmable modulation formats, scaling network capacity for their customers without scaling operational expense.

One of the key factors in PIPE's selection of the Infinera DTN-X platform was the attraction of a solution based on Photonic Integrated Circuits (PICs). Additional key benefits of the Infinera DTN-X platform include:

- PICs enable high capacity Wavelength Division Multiplexing to be integrated with 5 Tb/s of Optical Transport Network (OTN) switching without performance compromise;
- Integrated non-blocking OTN switching allows each wavelength to be efficiently utilized,

resulting in fewer wavelengths for a set of service demands;

- A reduction in capital and operating costs due to fewer fiber connections, less space and lower power consumption across the network, resulting in more cost effective services for PIPE's customers.

PIPE further benefits from an industry leading GMPLS control plane coupled with Bandwidth Virtualization™, allowing its engineers to deploy its network in days and provision services across the submarine and terrestrial network within minutes to meet the rapidly changing demand of its customers.

“Infinera’s solution for the 100G market provides our network with unique benefits which led to our decision to select the DTN-X platform,” said Lee Harper, Head of Network Engineering for PIPE Networks and the TPG Group. “The DTN-X platform’s interoperability between our existing terrestrial and submarine networks, its ease of use when provisioning services along with the elimination of transponders at cable landing stations all led to our decision. We move a significant amount of data around the country, and deploying the DTN-X allows us to distribute reliable, high-capacity services with great simplicity and with industry-leading provisioning lead times.”

“We are pleased to announce PIPE Networks as our first DTN-X super-channel deployment in the Asia-Pacific region,” said Tom Fallon, Infinera CEO. “Infinera’s FlexCoherent super-channels simplify the deployment of 100G for both subsea and terrestrial applications while delivering scalability and efficiency.”