

## **10Gbps NRZ-DPSK repeaterless transmission system for terrestrial applications**

### **ABSTRACT**

We investigated the performance of 10Gbps NRZ-DPSK repeaterless transmission system over 300km. The system is demonstrated experimentally over standard Single-Mode Fiber (SMF). The results showed the capability of terrestrial repeaterless transmission systems as a cost effective solution for improving broadband penetration particularly for rural areas.

**Keyword:** NRZ-DPSK; Repeaterless transmission system; Terrestrial and single-mode fiber