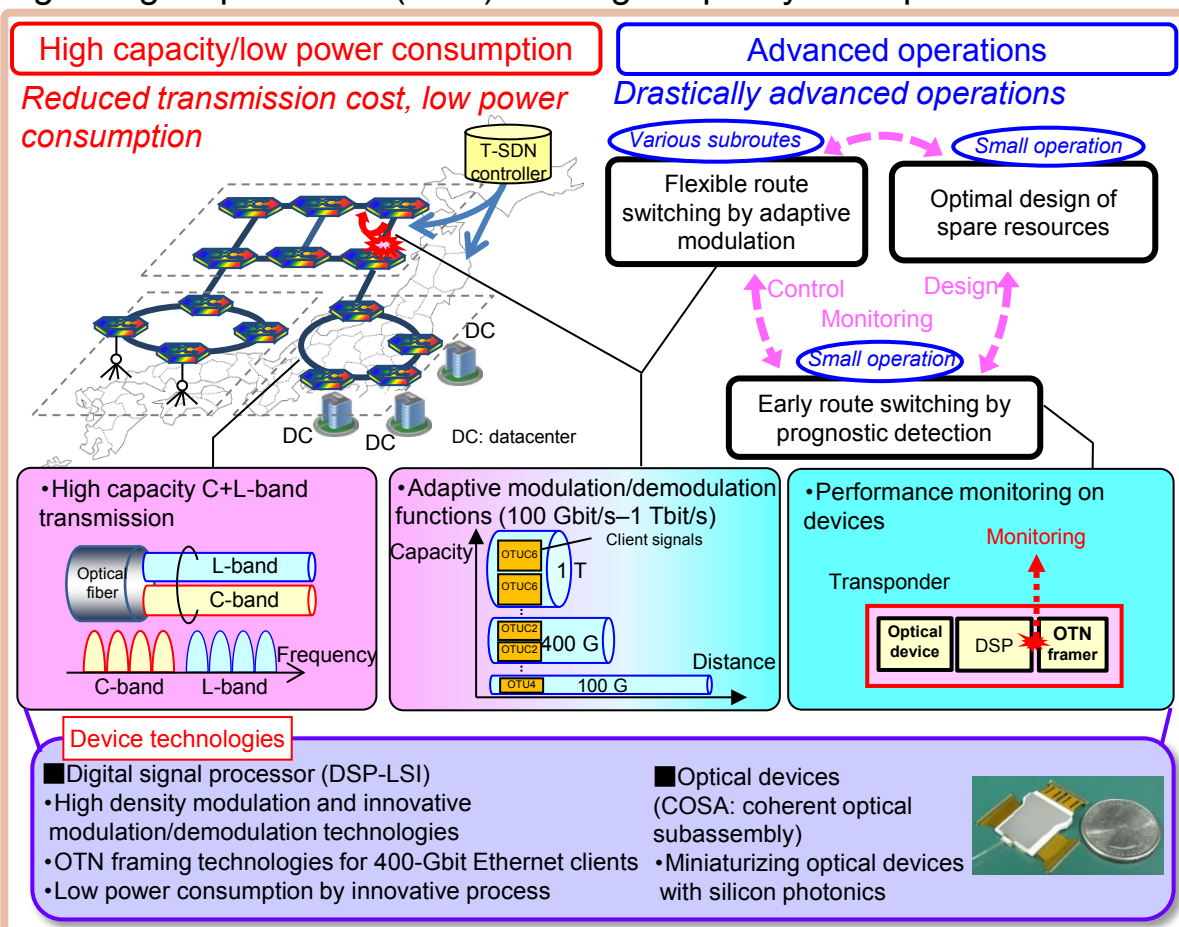


## 1-Tbit/s optical transport network with advanced operations

A high capacity transport network with advanced operations must be constructed economically as the next-generation optical transport infrastructure supporting the NetroShere. We are researching a 1-Tbit/s optical transport system with a reduced transmission cost, low power consumption, and drastically advanced operations based on its element technologies such as a digital signal processor (DSP) with high capacity and optical/electrical devices with low power consumption.



## Features

- Adaptive modulation/demodulation functions on the 1-Tbit/s DSP enable transmission at an optimal rate between 100 Gbit/s to 1 Tbit/s according to the transmission distance.
- Performance monitoring on devices enables automatic prognostic detection and recovery of silent failures.
- High capacity transportation at 1 Tbit/s and long distance transmission at 400 Gbit/s is achieved by using innovative technologies such as a digital coherent transmission scheme on DSPs.
- Innovative silicon photonics technologies make it possible to achieve low power consumption and miniaturization of optical devices.

## Application Scenarios

- Next-generation 1-Tbit/s optical transport systems

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