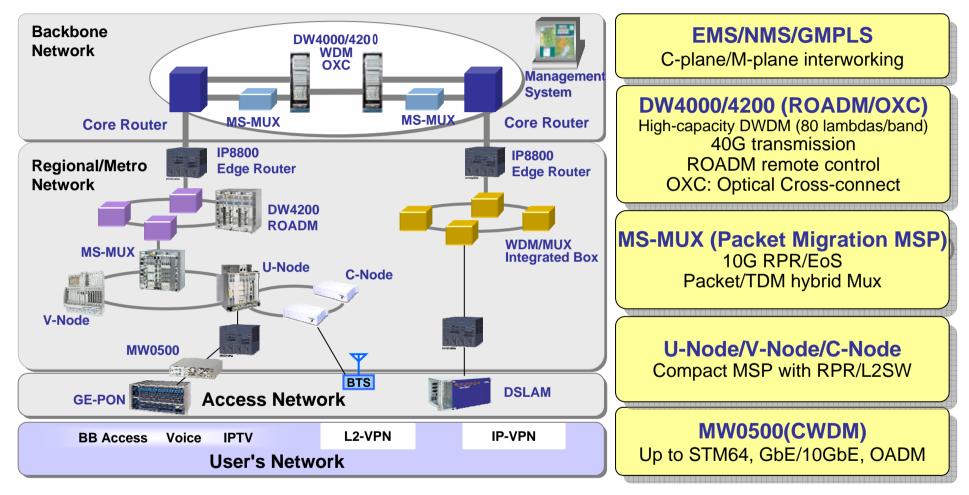
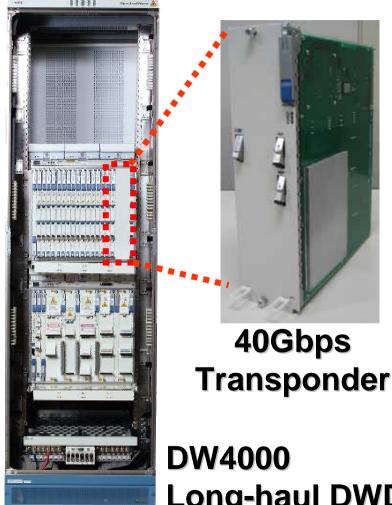
# NEC Products for Next Generation IP/Optical Network



Low environmental impacts: low power-consumption, small footprint

Empowered by Innovation

## SpectralWave DW4000/DW4200 40Gbps DWDM Transponder



Long-haul (up to 1000 km) and stable transmission of 1.6 Tbps (40 Gbps x 40 lambdas) achieved by employing NEC's world-leading photonics technologies

#### Core tech. 1: RZ-DPSK format

> High sensitivity characteristic brings large tolerance to optical noise.

RZ-DPSK: Return-to-Zero Differential Phase Shift Keying

### Core tech. 2: Dynamic Dispersion Compensation

> NEC's original Electronic Dispersion Compensator (EDC) IC realizes stable performance against waveform distortion variation.

Long-haul DWDM System



# **GMPLS Capability of SpectralWave DW4200**

Intelligent control of flexible ROADM networkWorld's first demonstration of interworking with routers

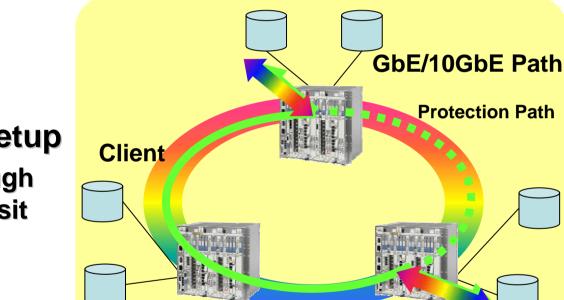
## GMPLS capabilities

- RSVP-TE, OSPF-TE
- Graceful Restart

## Rapid lambda-path setup

- Automatic pass-through configuration for transit nodes
- Automatic lambda assignment and tunablelaser control

Iaser control Protection path setup



10G Lambda Path

## **Demonstrating at the Showcase!**



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