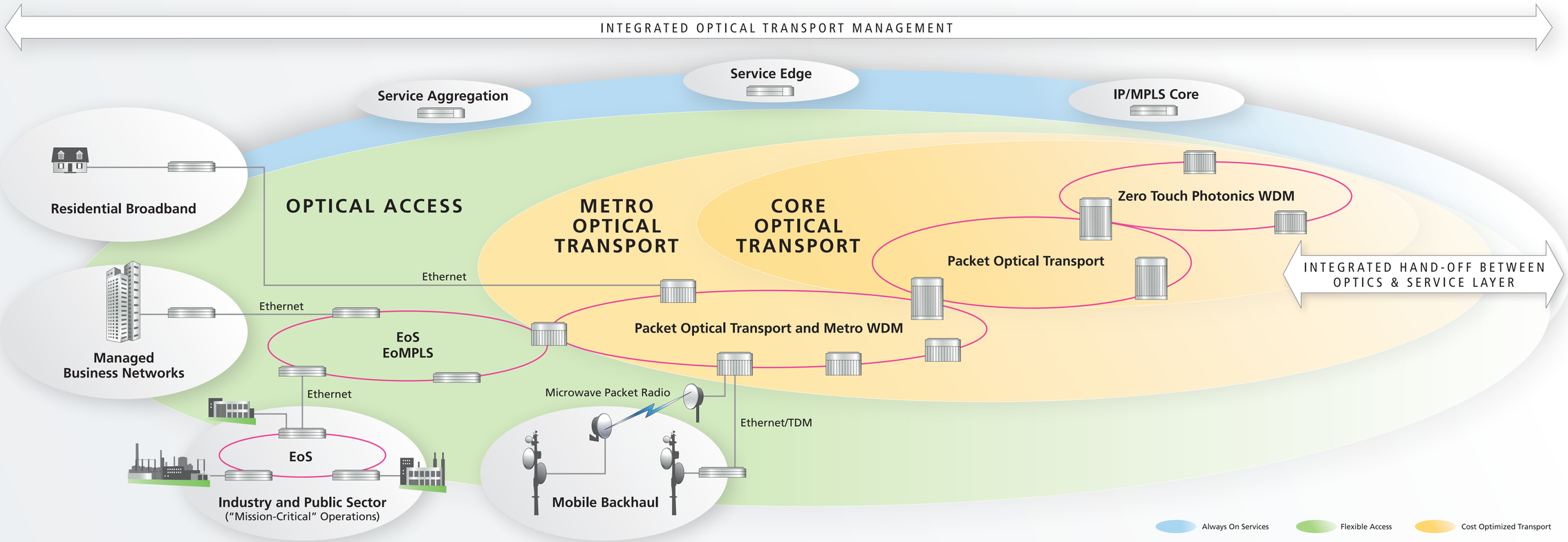
Carrier Ethernet Transport

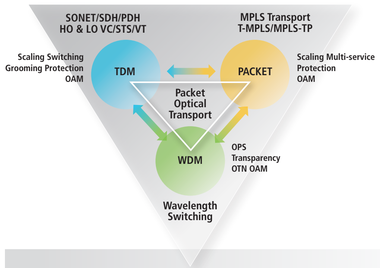
PACKET-OPTICAL EVOLUTION

Alcatel·Lucent



Real Flexibility

PACKET OPTICAL TRANSPORT



Alcatel-Lucent's Packet Optical Transport systems provide:

Flexibility in Carrier Class Ethernet Transport
Provides carrier class transport for all technologies

Flexibility for Network Optimization
Allows the transport network to be designed to meet the service demands

Flexibility for Network Evolution
Leverages the embedded base while seamlessly allowing transformation to MPLS based packet optical transport

Flexibility in Network Technology
Switches packets and circuits natively

Flexibility of Network Investment
Supports SDH/SONET, WDM/OTN and Ethernet/MPLS in any combination

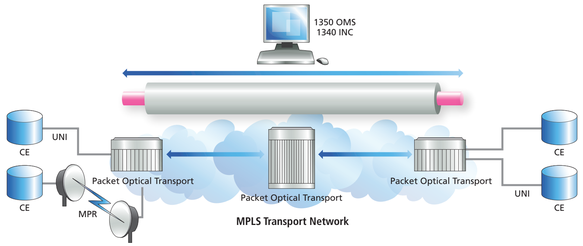
Packet Optical Transport

Support of TDM/Packet/WDM Carrier Grade in each single category

- Standardized Services
- Quality of Service
- Scalability
- Reliability
- Service Management

Real Manageability

OAM, MPLS TRANSPORT AND OSS



MPLS transport with sophisticated OA&M for effective transport of Carrier Ethernet:

Manageability in Protection
Provides protection equivalent to or better than SDH/SONET: protection switching <50 ms and 1+1, 1:1, N:1 protection schemes in Linear, Ring and DNI architectures

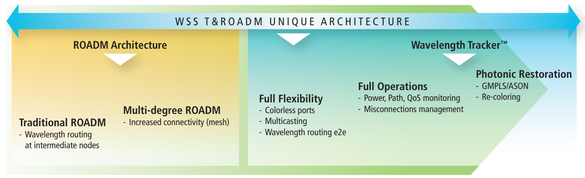
Manageability in Restoration
Controlled by the network and/or the management system for all network topologies

Manageability in Performance Monitoring
Allows the management system to monitor and analyze performance data to ensure that SLAs are met

Manageability in Fault Localization
Powerful fault localization tools in the Management Systems (1350 OMS and 1340 INC) to identify and localize network faults

Real Reliability

PHOTONICS AND WAVE DIVISION MULTIPLEXING



Zero-Touch Photonics provided by T&ROADM and Photonic restoration enhance the inherent photonics reliability

Reliable routing of bandwidth with ROADM and Tuneable ROADM
- Traditional ROADM provides flexibility to route between intermediate nodes
- Multi-degree ROADM allows meshing and reduces blocking
- Fully Tuneable ROADM simplifies operations, providing full remote configuration

Reliable Monitoring and Tracking with Wavelength Tracker
- Full Operations with end to end traffic management and automated remote provisioning and assurance

Reliability of "always-on" services with Photonic Restoration
- Photonic Restoration provides resilience and complements digital survivability

Real Solutions

BASED ON OPTICAL CARRIER ETHERNET DEPLOYMENTS

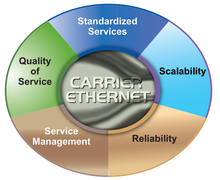
Alcatel Lucent's Carrier Ethernet Transport (CET) solutions have been used extensively to provide Real Solutions:

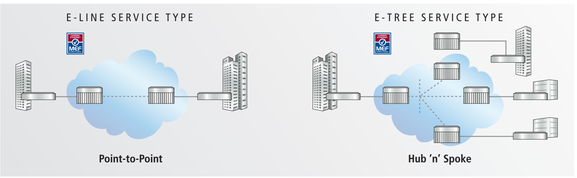
Real Solutions for Mobile Backhaul (Optical and Microwave)
Packet Optical Transport with Microwave Packet Radio provide Mobile Backhaul solutions that allow operators to re-use their embedded base whilst using the inherent qualities of redundancy, high availability and scalability provided by Optics and Microwave platforms

Real Solutions for Managed Business Networks
Packet Optical platforms allow service providers to offer secure, robust, scalable, Carrier Ethernet Transport solutions to their customers

Real Solutions for Triple Play Transport
Carrier Ethernet Transport provides an optimized, reliable transport infrastructure for Triple Play

Real Solutions for Industry and Public Sector
Optics and Microwave provide solutions with the resilience, flexibility, and reliability required to support real-time business and mission-critical operations.





9500 MPR

1850 TSS-5
1850 TSS-3
1655 AMU
1645 AMC
1643 AMS
1642 EM/C

1850 TSS-100
1850 TSS-40
1660 SM
1662 SMC
1650 SMC
1665 DMX/DMXtend

1626 LM
1696 Metrospan
1625 LambdaXtreme

1850 TSS-320/160
1678 MCC
1675 LambdaUnite MSS
1671 SC

1350 OMS
1340 INC

7750 SR
7450 ESS

CARRIER ETHERNET CERTIFIED MEF Carrier Ethernet

MEF-9 – Carrier Ethernet Services
MEF-14 – QoS and Traffic Management

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