Networks in Transition: Fixed-Mobile IP Convergence

Consumers
Personalization

Business
Collaboration & Productivity

Consumer Smartphones — Tablets — Enterprise Smartphone — Netbooks — Laptops — DataCards

Convergence

Connected Home   Mobility
Enterprise Networks
Voice   Broadband Data
IMS   Video   Entertainment

Enabling New Experience!

Enterprise
POLYCOM   amazon webservices   Google
Microsoft   GoToWebinar   CNN Video
salesforce.com   AVAYA   SAVVIS

Consumer
BitTorrent   VONGO   Sling   AKIMBO
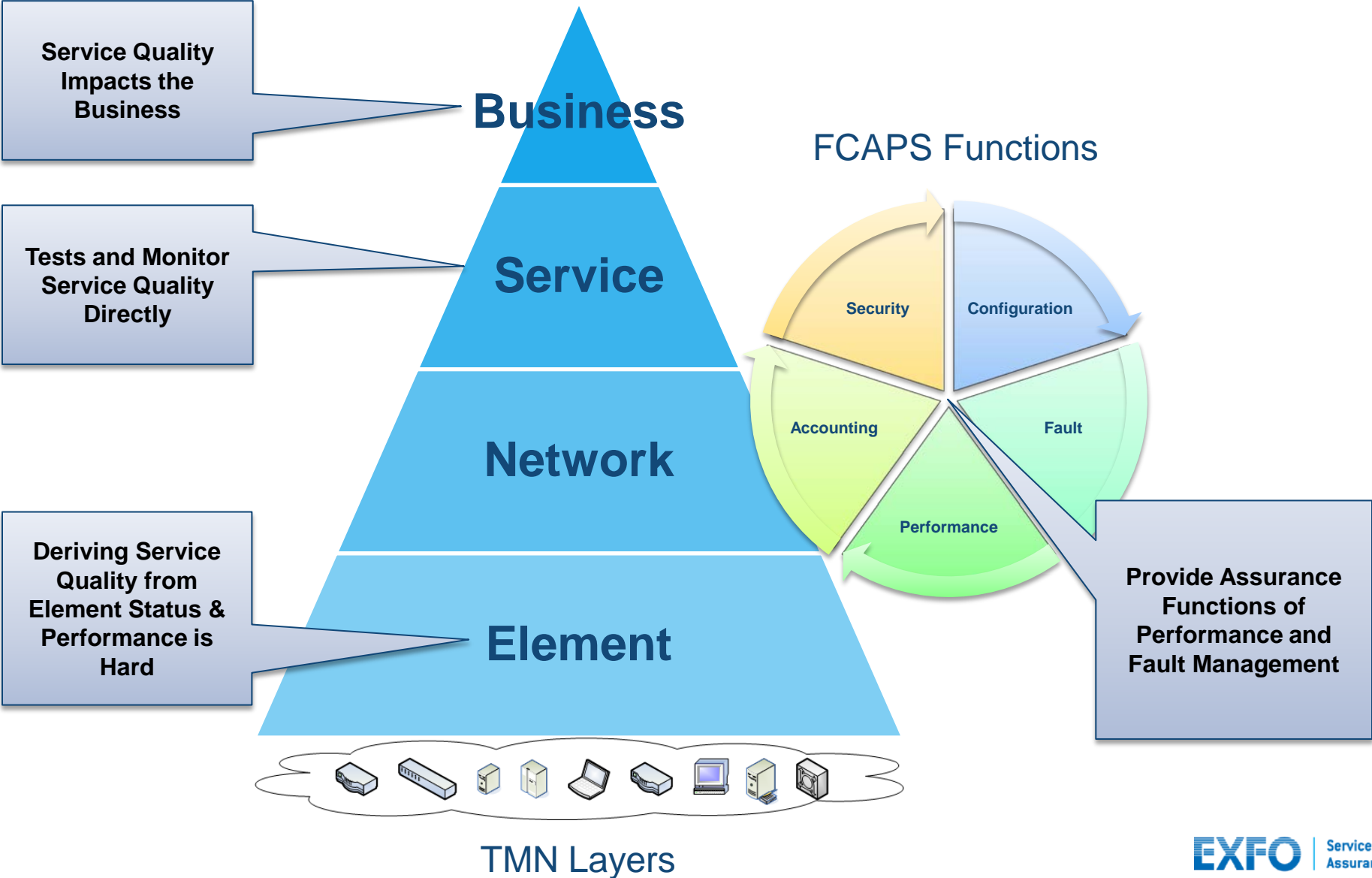XBOX   YouTube   Vonage   hulu   skype

Connecting – Users with apps; apps with networks and networks with each other

Delivering and Managing Network & Service Quality:
Key Pieces of the Puzzle
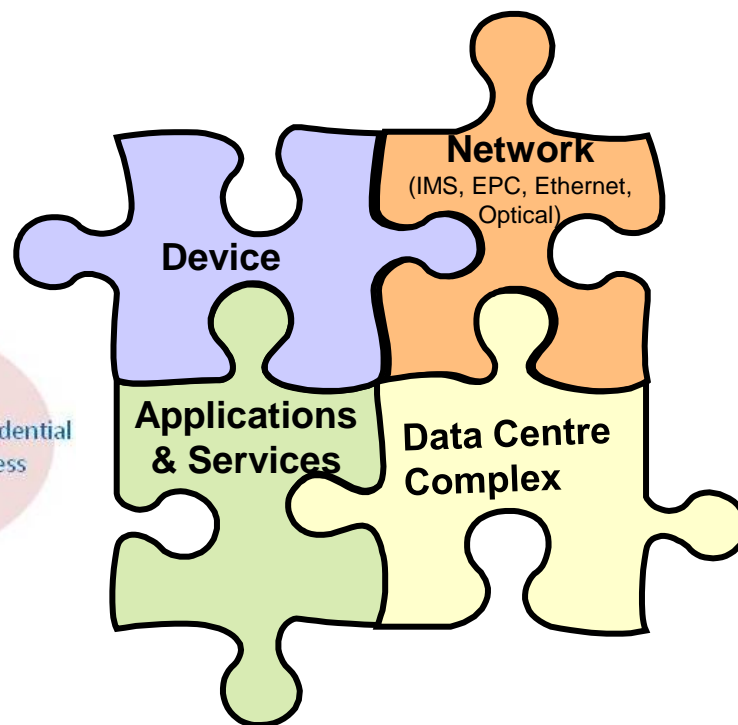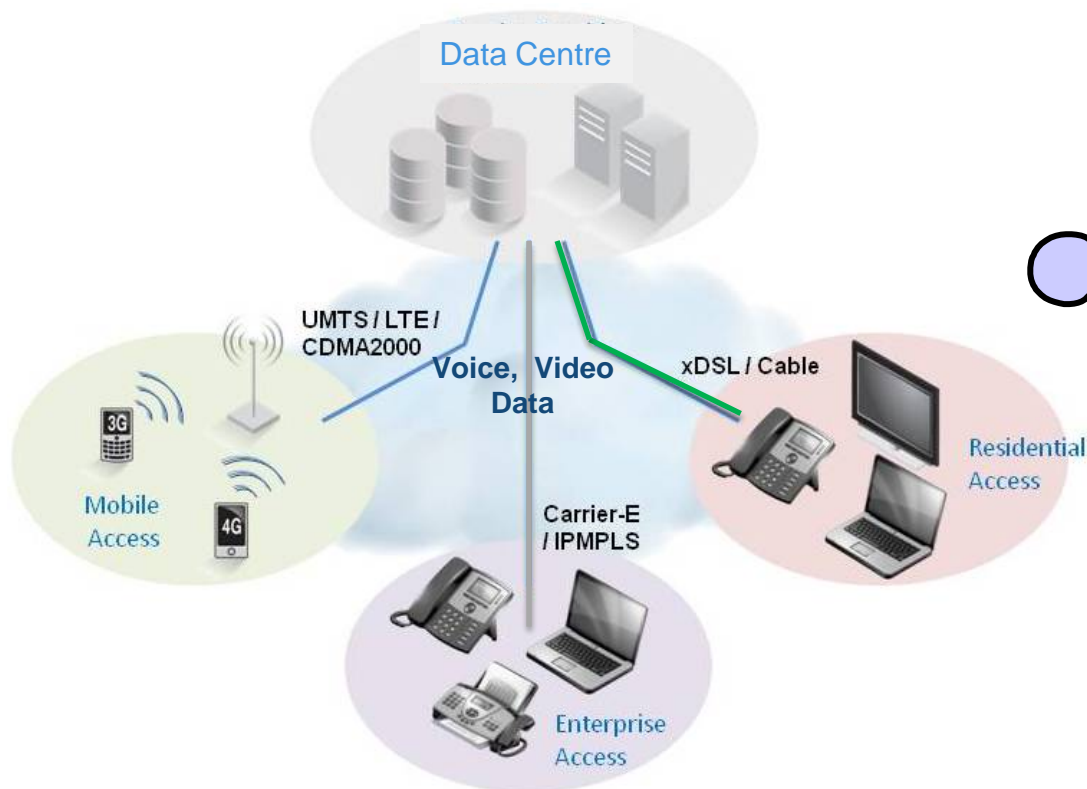
Deliver rapid trouble identification, segmentation, isolation and SLA assurance

What Service Assurance Is

Service Quality Impacts the Business

Tests and Monitor Service Quality Directly

Deriving Service Quality from Element Status & Performance is Hard

Business

Service

Network

Element

TMN Layers

FCAPS Functions

Security

Configuration

Accounting

Fault

Performance

Provide Assurance Functions of Performance and Fault Management

EXFO | Service Assurance

Proactive Testing

Proactive Monitoring

Presentation Layer

KPI & KQI Engine

Test near Users

Test in Network

Monitor near Servers

Monitor near Users

› Continuous, Repeatable, Reliable, Accurate, Representative

› Suitable for Measuring SLAs and Service Objectives

› Isolate the Problem

› Measures Customer 's True Experience & True Behavior

› Correlated Views, End-to-End

› Detailed Traces for Diagnosis

Test the Service, not the Server

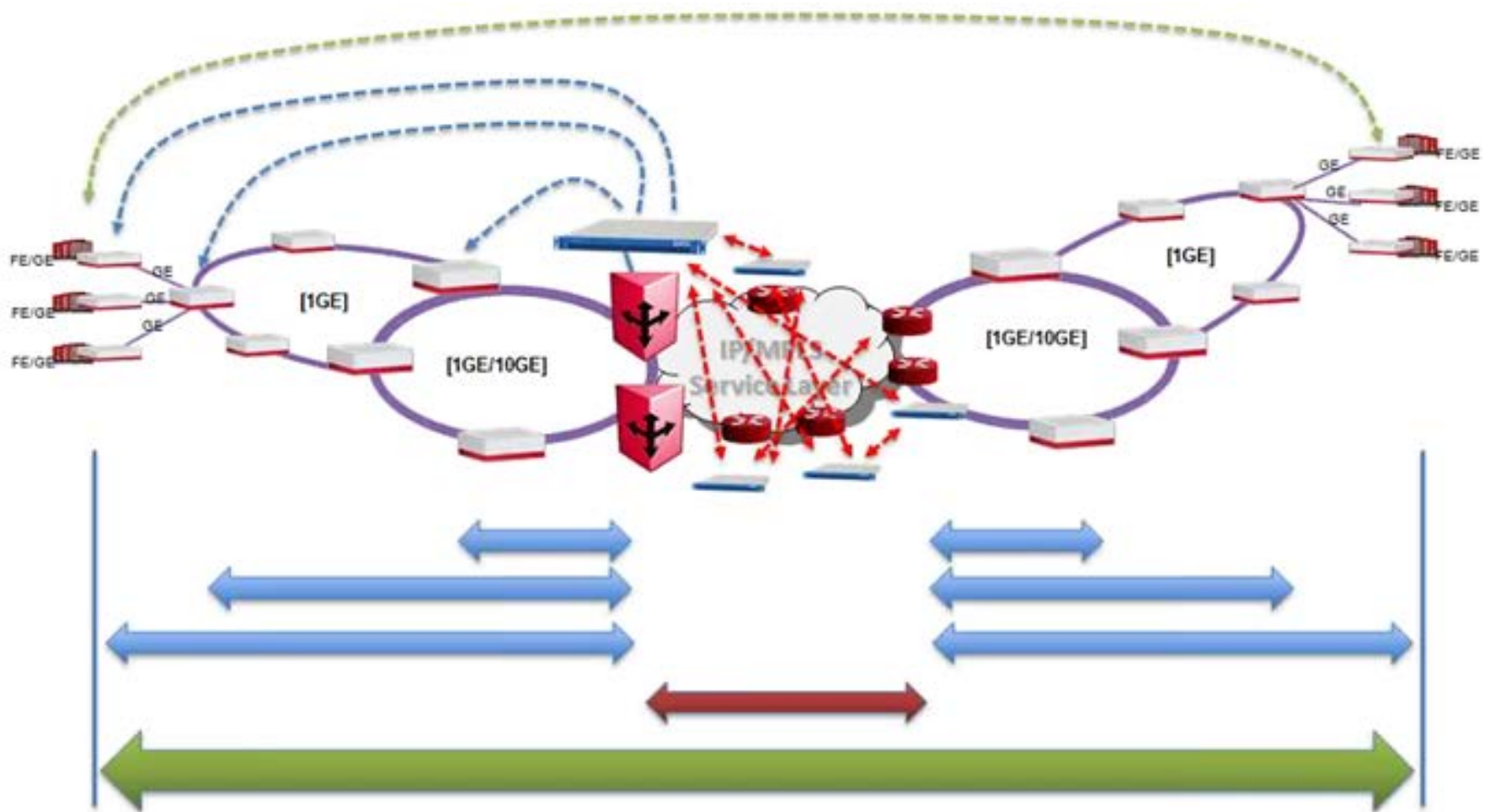**Monitor the Service, not the Circuit**

EXFO | Service Assurance

Example: Ethernet Mobile Backhaul Turn-up through Operational Monitoring
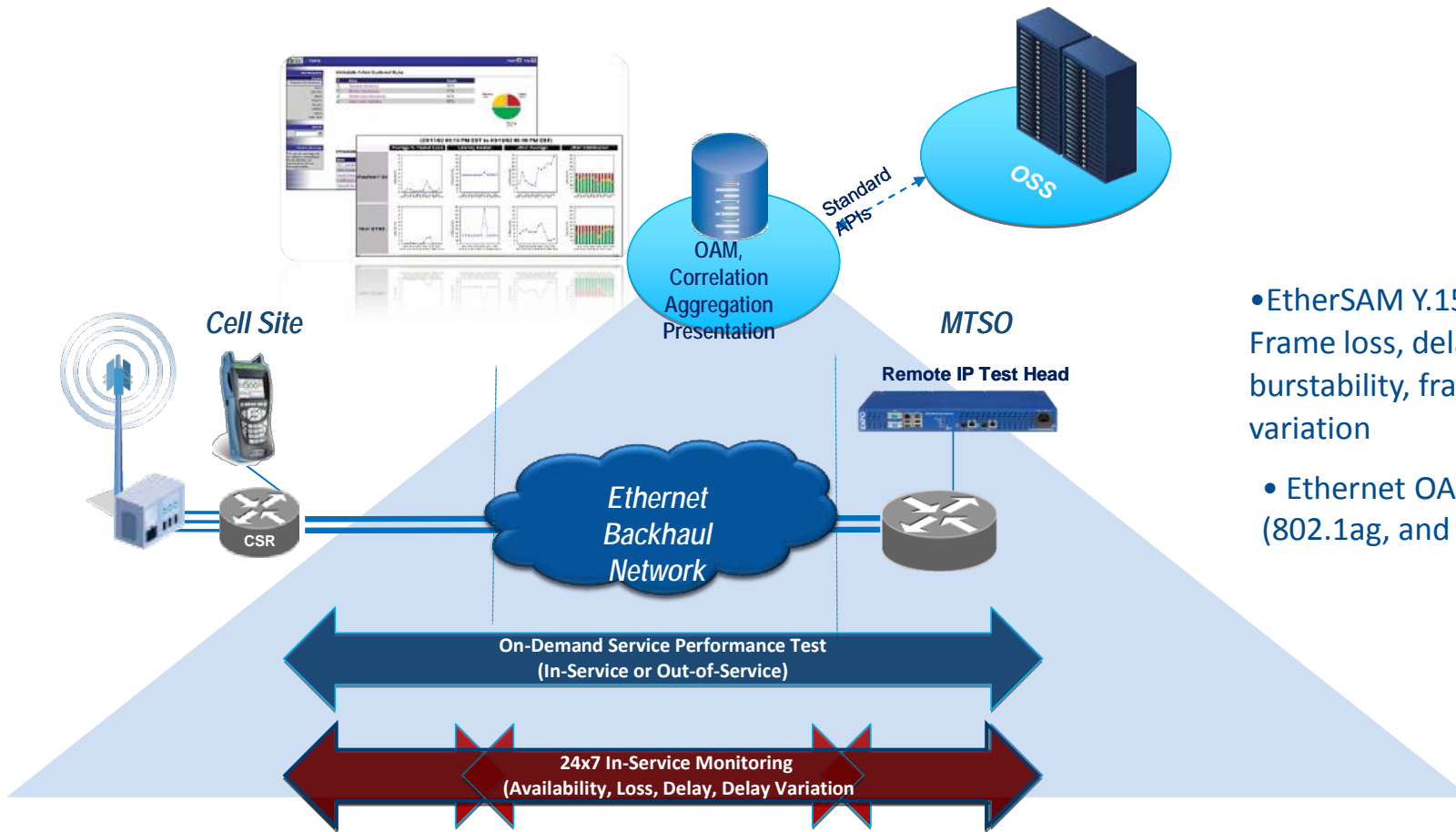
- EtherSAM Y.1564 for Turn-up Frame loss, delay, throughput, burstability, frame delay variation

- Ethernet OAM standards (802.1ag, and Y.1731)

Service Assurance Users

Network Operations

- Monitor network quality; troubleshoot degradations
- Verify network configuration changes.

Network Planning / Traffic Engineering

- Monitor network loading trends.
- Plan network restructuring

Service Management

- Monitor adherence to SLAs
- Isolate SLA non-conformance.

Customer Care

- Determine subscriber service status
- Initiate needed subscriber tests

Business Managers / Marketing

- Monitor service uptake & marketing campaign effectiveness

Summary

› Network & Service complexity is increasing, Network Operations require

  › A highly efficient turn-up testing, troubleshooting, performance monitoring and service assurance framework to keep the cost down and improve efficiency

  › In order to ensure performance, service delivery and quality of experience (QoE), complete visibility and access to key interfaces is essential