



LTE – Towards Mobile Broadband

Dallas, January 26th, 2009

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New broadband services are driving network evolution



Realtime multimedia

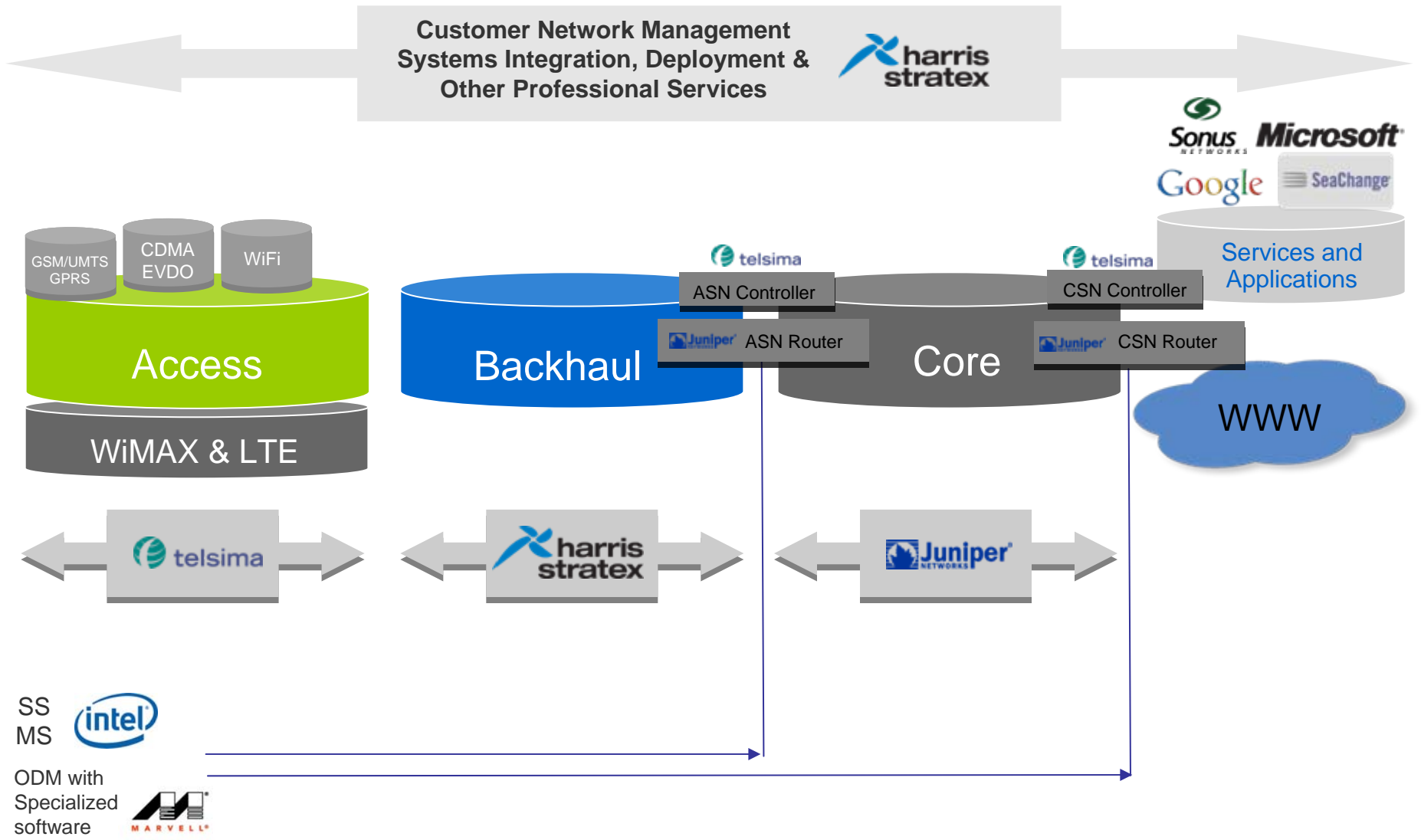
Drivers for 4G – Need to increase ARPU

Enable New Revenue Streams for Wireless Operators

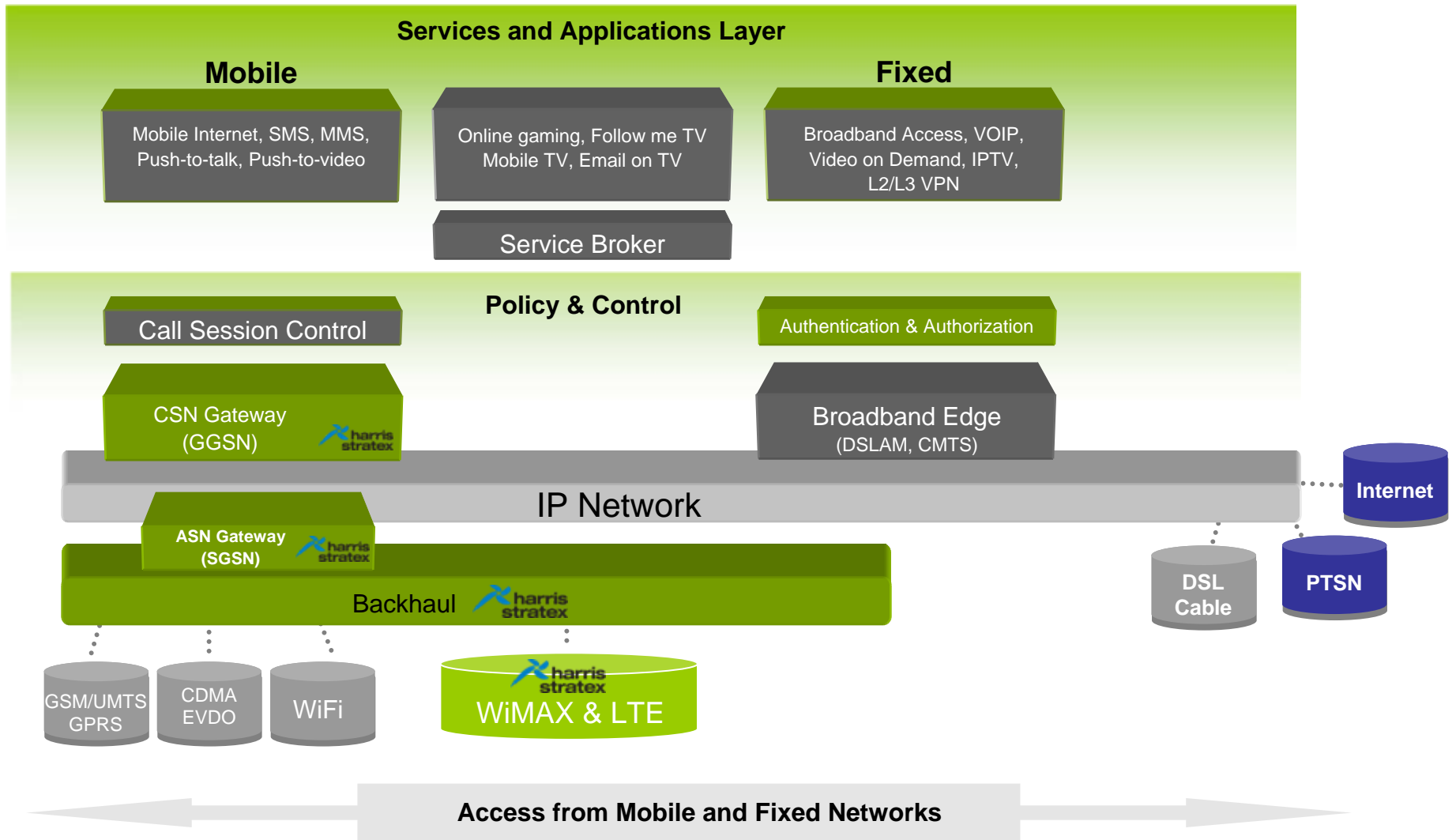


- Consumer Services
 - *Wireless Broadband Access*
 - *Voice-Over-IP*
 - *Video-On-Demand*
- Enterprise Services
 - *Wireless Broadband Access*
 - *Virtual Private Networks (VPN)*
- Hosted Services
 - *Email and Web Hosting*
 - *Multimedia Hosting*

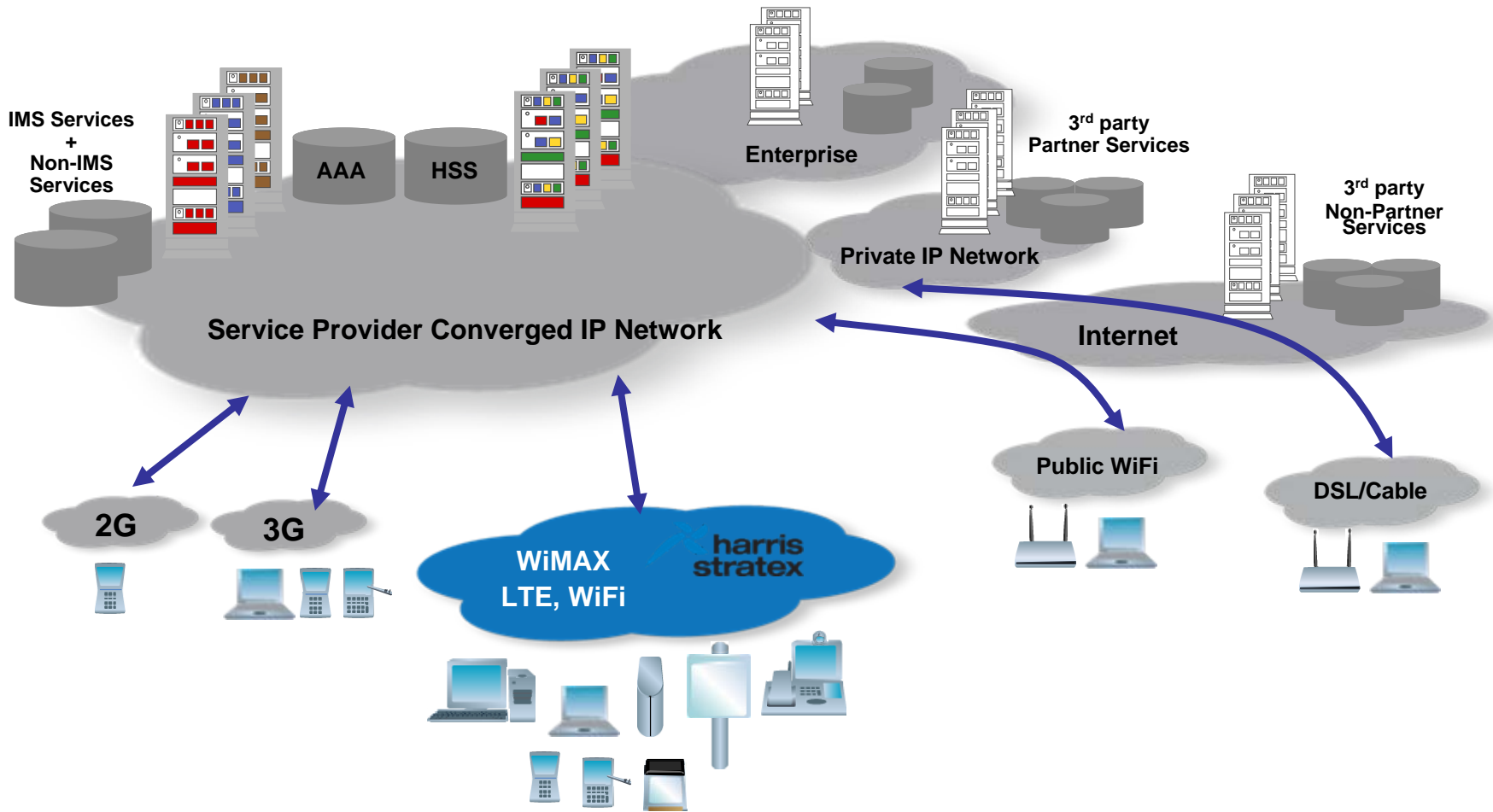
HSTX 4G Strategy Overview



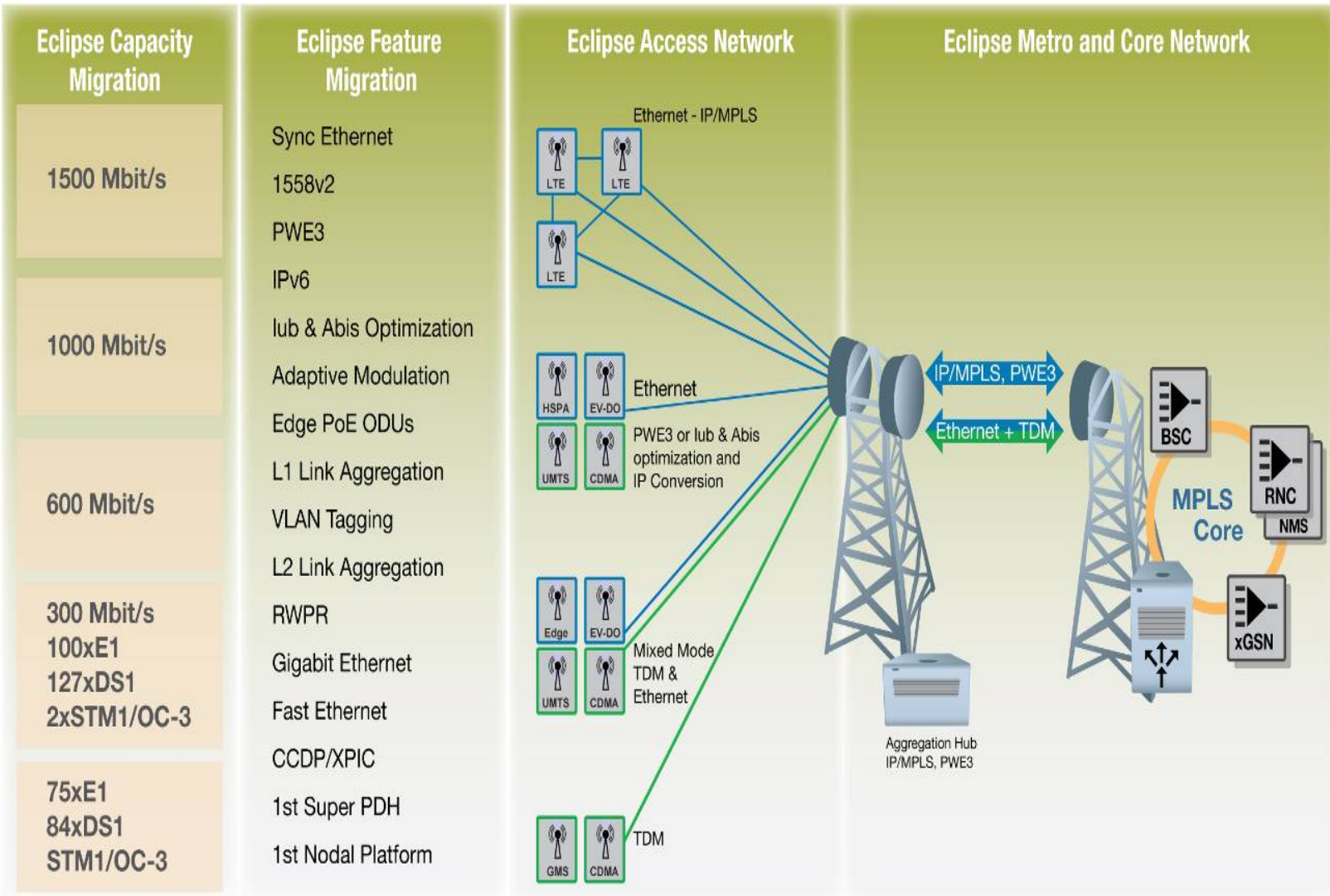
Converged Services Architecture



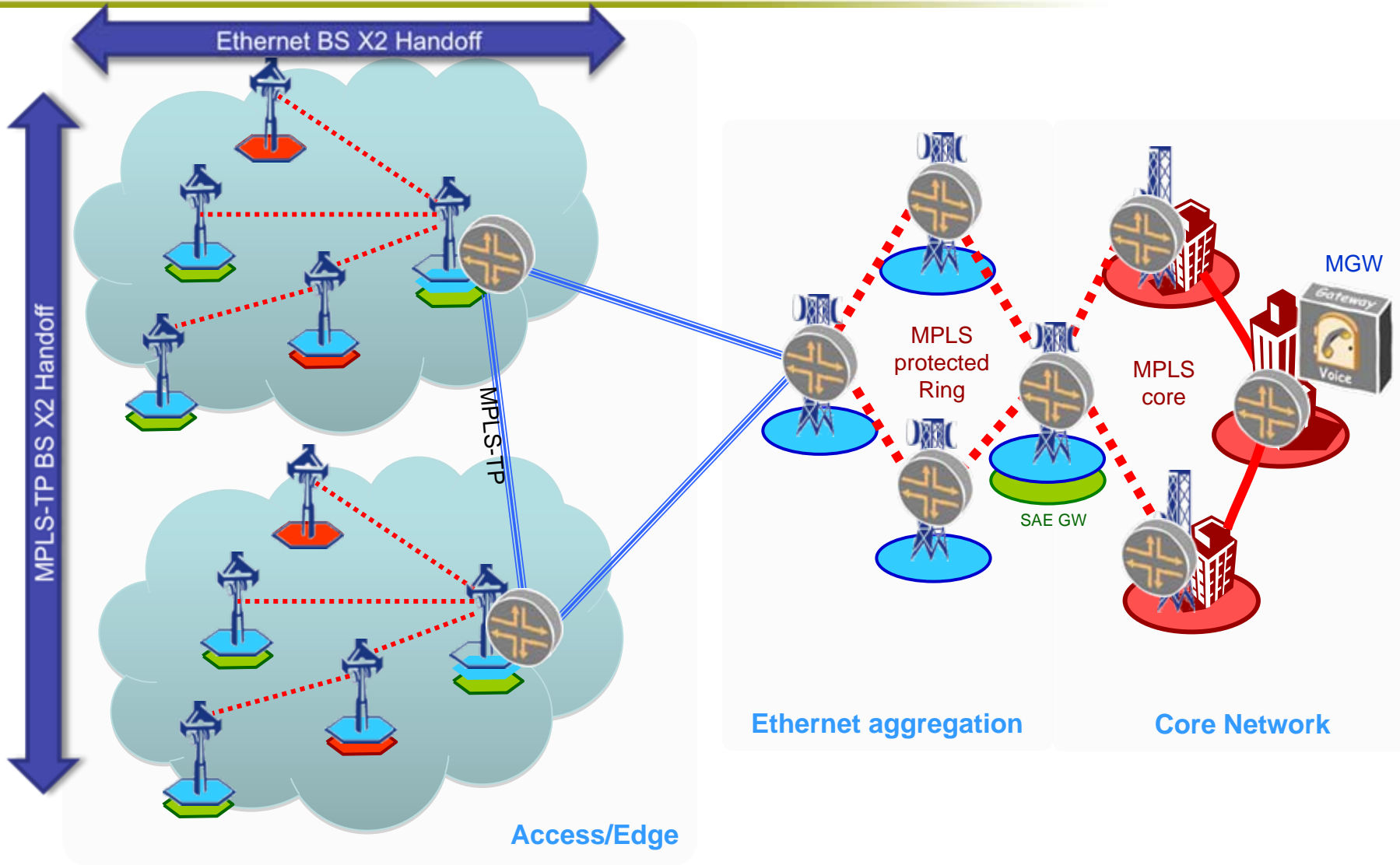
Wireless Operator Services Architecture



Complete solution for IP network evolution



LTE Migration



Wireless Backhaul Works



- **Low initial investment** – pay only for capacity that you need
- **Scalable** – additional capacity, minimal cost, software enabled
- **Reliable** – Fiber-like reliability (>99.999% system availability) and resilient network options
- **Proven** – millions of base stations connected by wireless worldwide
- **Future-Proof** – supporting smooth migration to all-Ethernet/IP transport

- Flat architecture – IP from core to edge
- Higher Capacity to cater to 2G/2.5G/3G/LTE
- Mixed mode backhaul – carry TDM and IP traffic
- Adaptive optimization – Maximum bits/Hertz
 - *Optimize TDM backhaul (Abis optimization)*
 - *Adaptive modulation*
- Tight integration between backhaul, access and core network
 - *Base Station and Core adapt to backhaul condition*
 - *Access network can provide better QOS*
 - *Reassign resources SLA*