



***Applications of
MPLS Guaranteed
Bandwidth Services***

**Voice Trunking over MPLS
Virtual Leased Lines**

Target Applications

- **Voice Trunking**

 - Solution 1: Toll Bypass with Voice Network**

 - Solution 2: Toll Bypass with Voice/Data Converged Network**

 - Solution 3: Toll Bypass with VoIP Network**

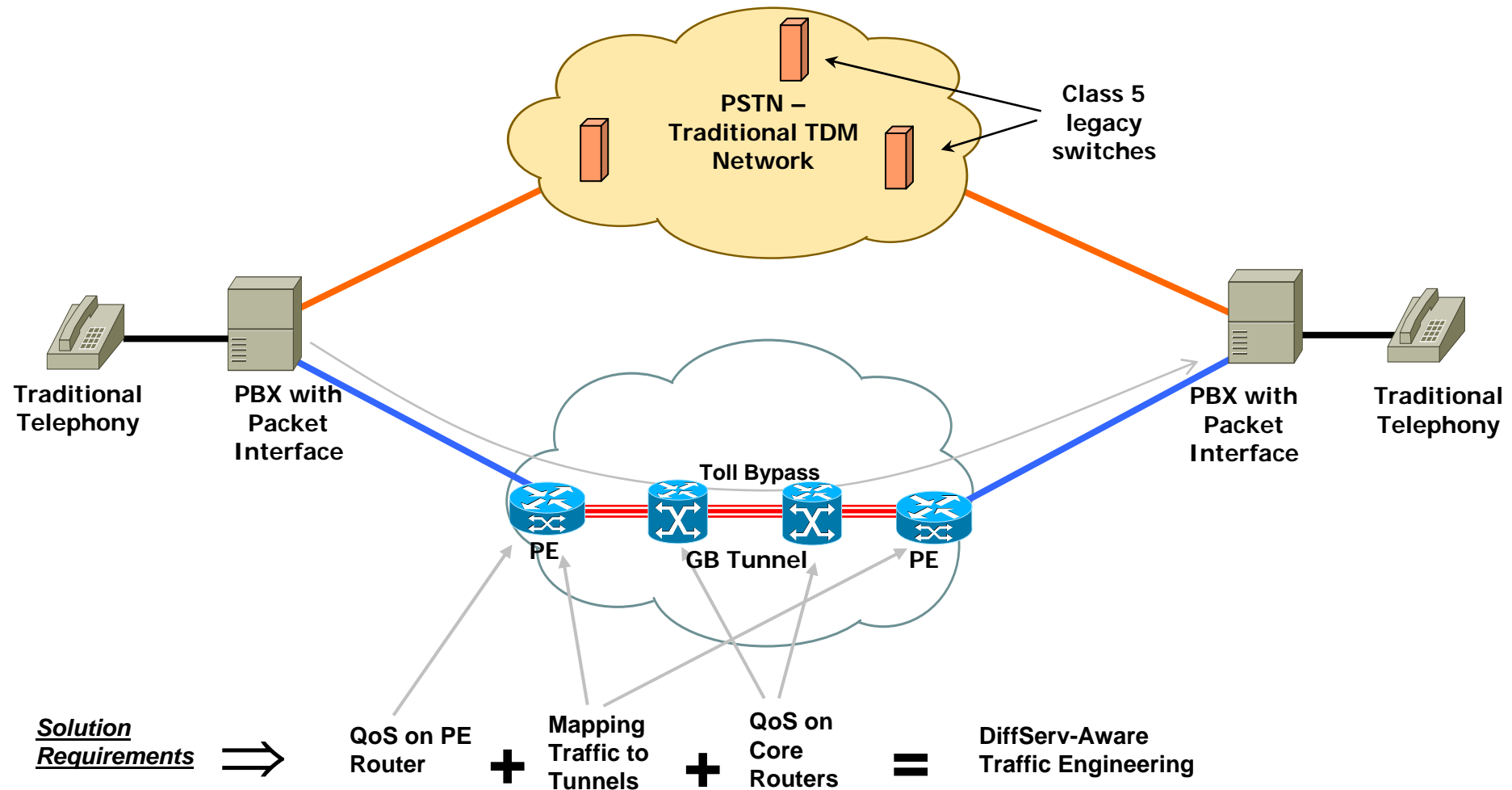
- **Virtual Leased Lines**

 - Solution 4: Virtual Leased Lines – Serial Links**

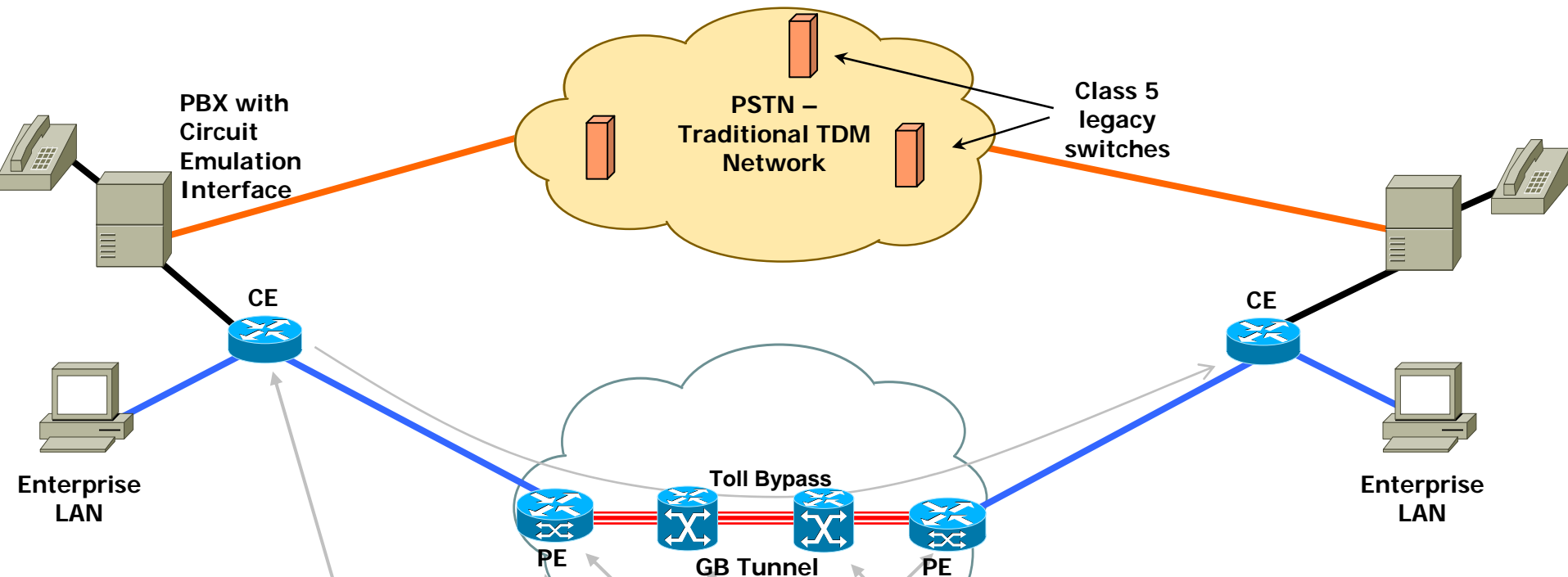
 - Solution 5: Virtual Leased Lines – Frame Relay**

 - Solution 6: Virtual Leased Lines – ATM**

Solution 1: Toll Bypass with Voice Network

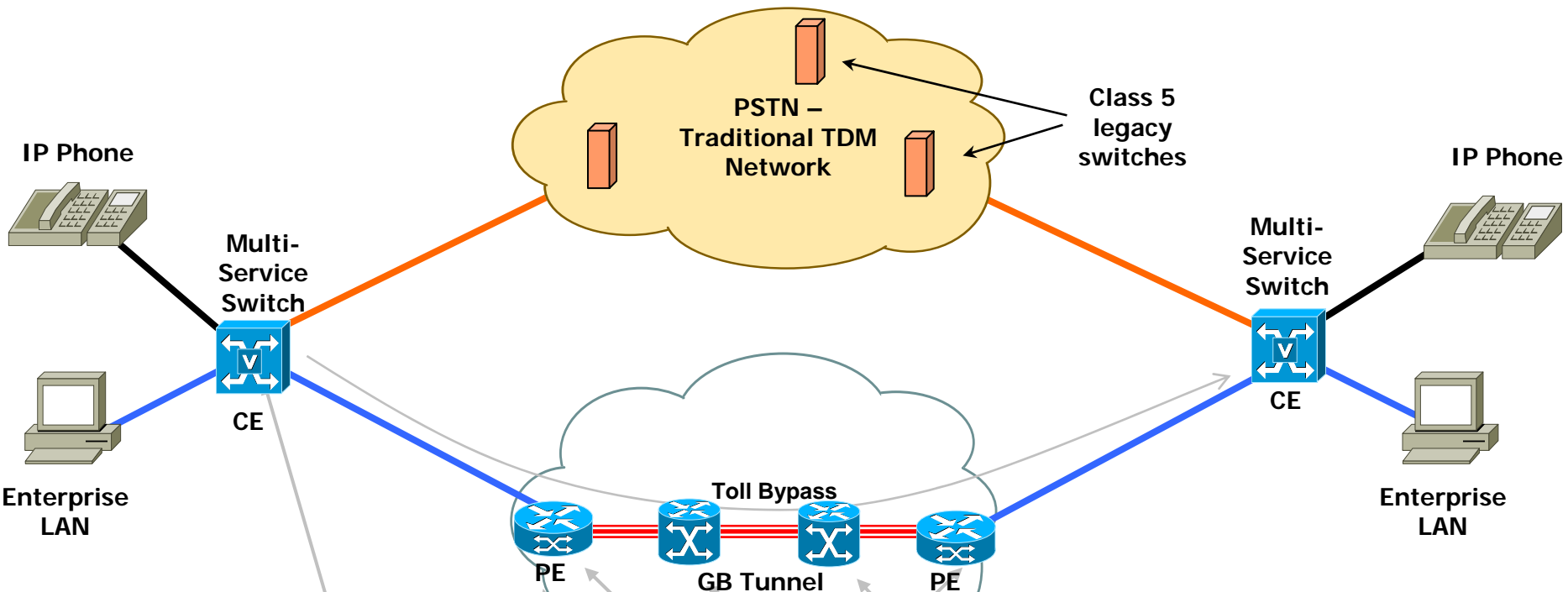


Solution 2: Toll Bypass with Voice/Data Converged Network



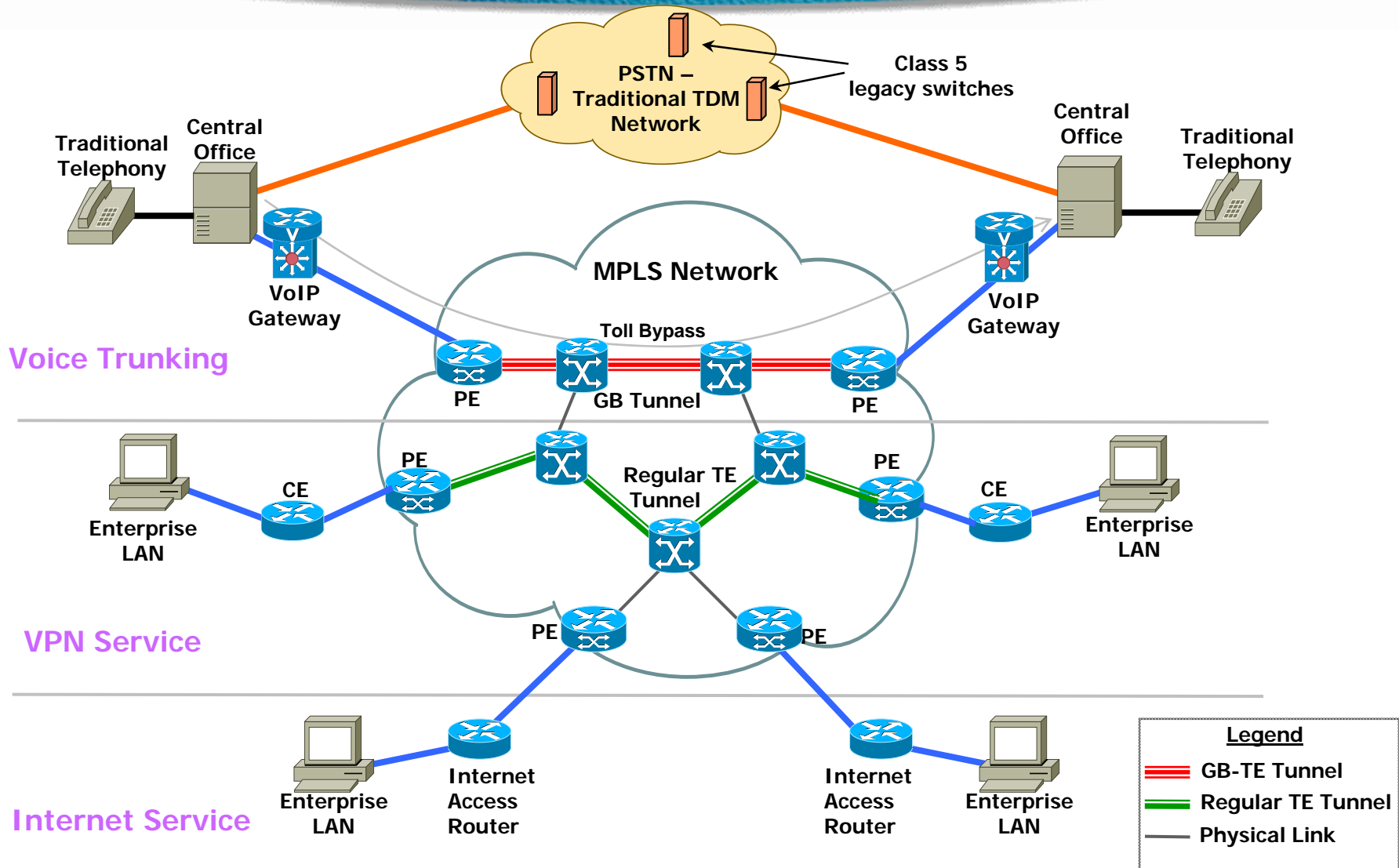
Solution Requirements ⇒ QoS on CE Router + QoS on PE Router + Mapping Traffic to Tunnels + QoS on Core Routers = DiffServ-Aware Traffic Engineering

Solution 3: Toll Bypass with VoIP Network

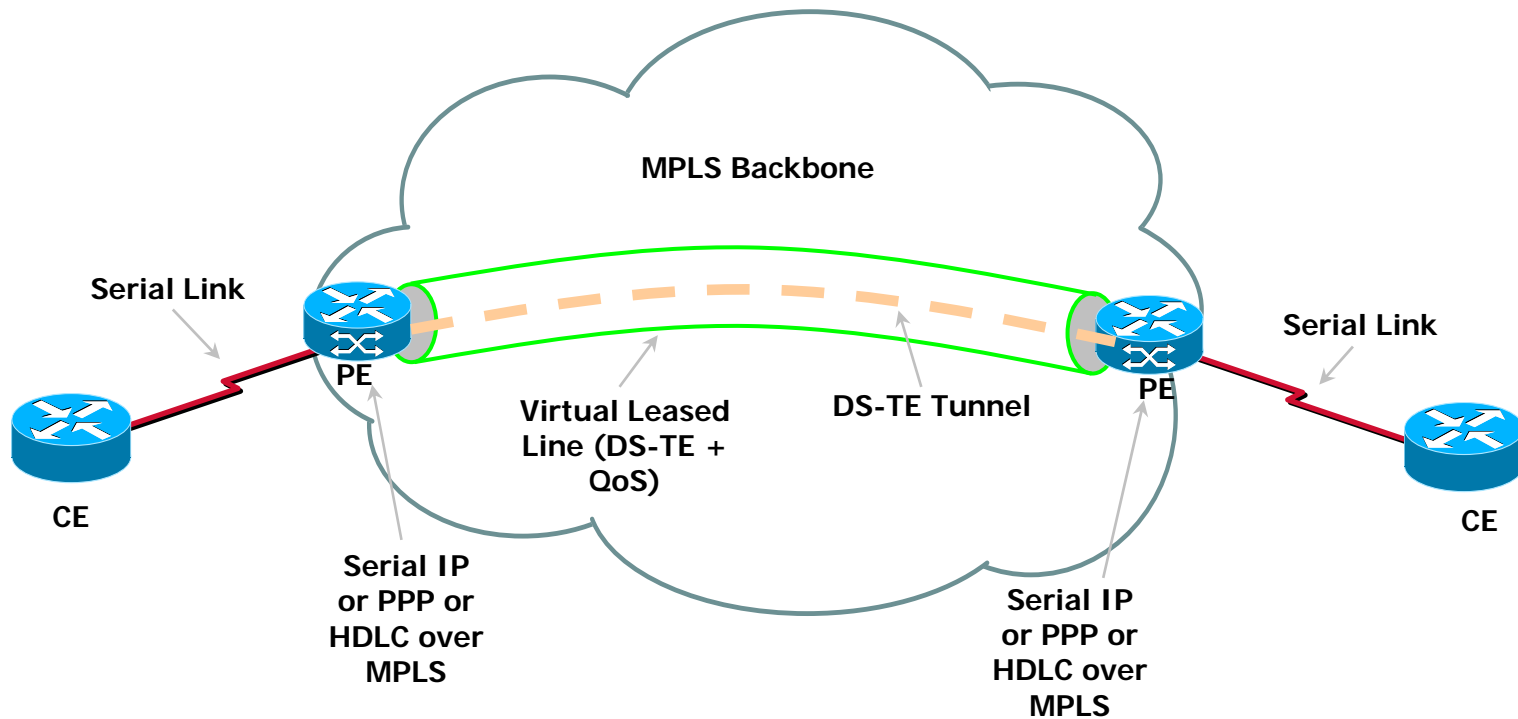


Solution Requirements ⇒ QoS on CE Router + QoS on PE Router + Mapping Traffic to Tunnels + QoS on Core Routers = DiffServ-Aware Traffic Engineering

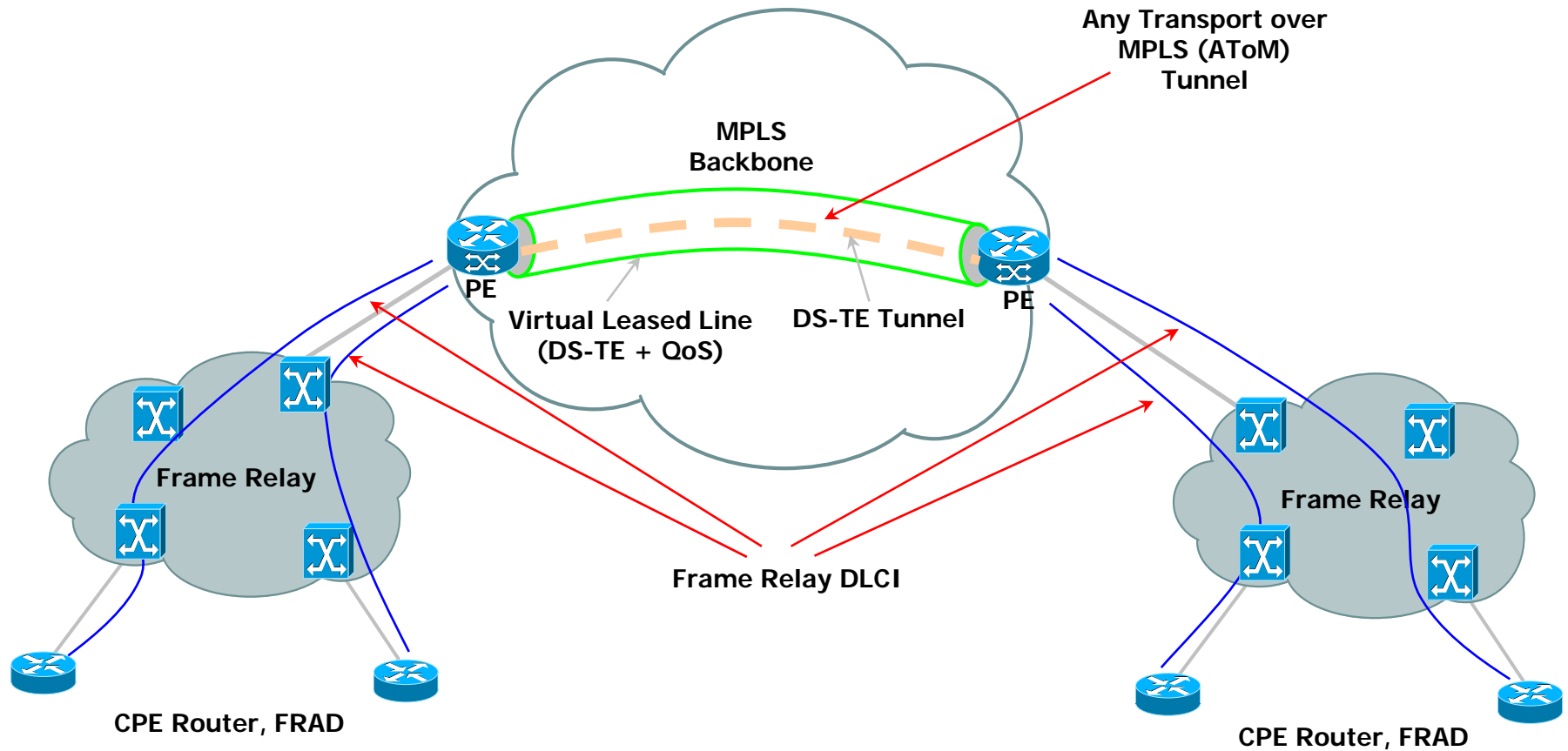
Voice Trunking Summary



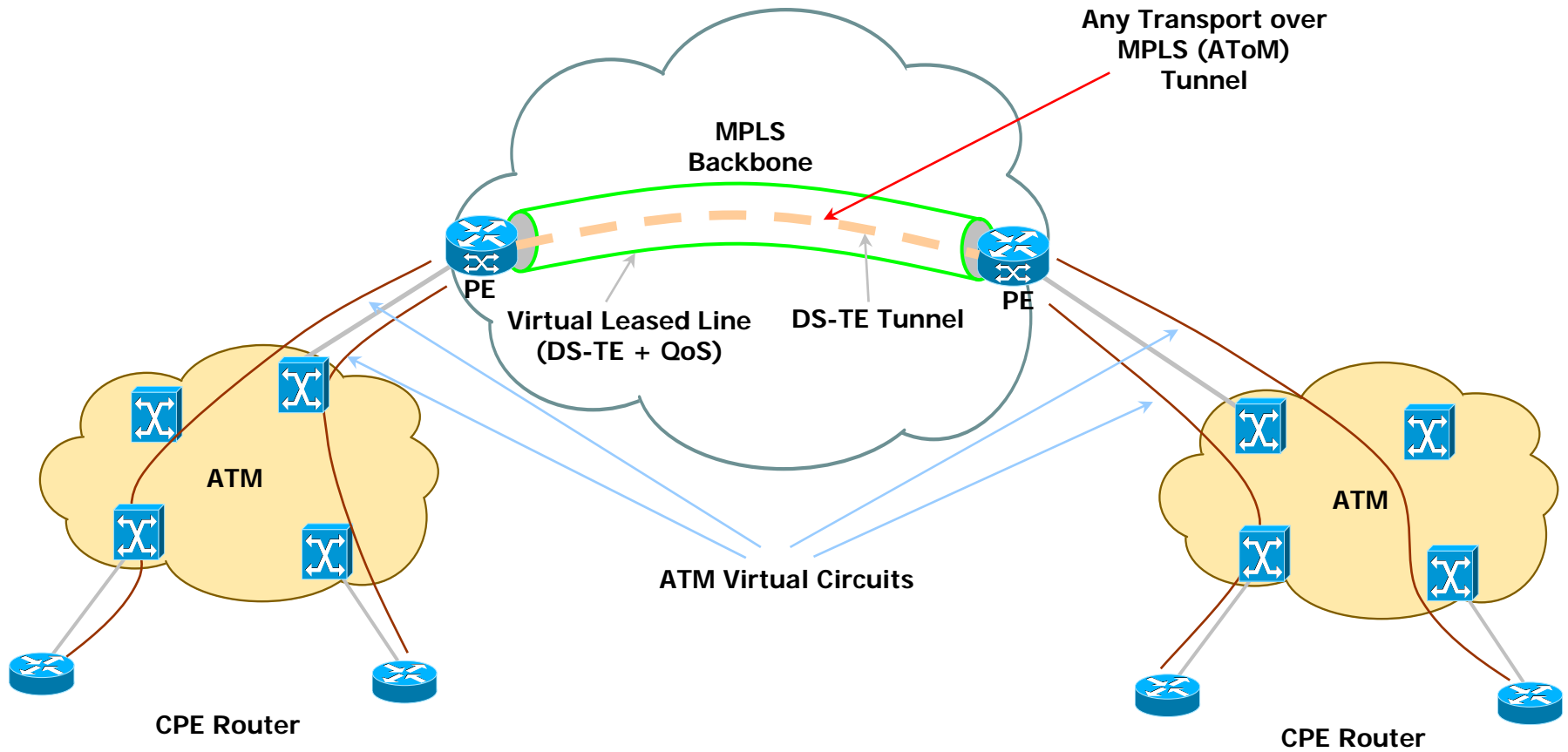
Solution 4: Virtual Leased Lines – Serial Links



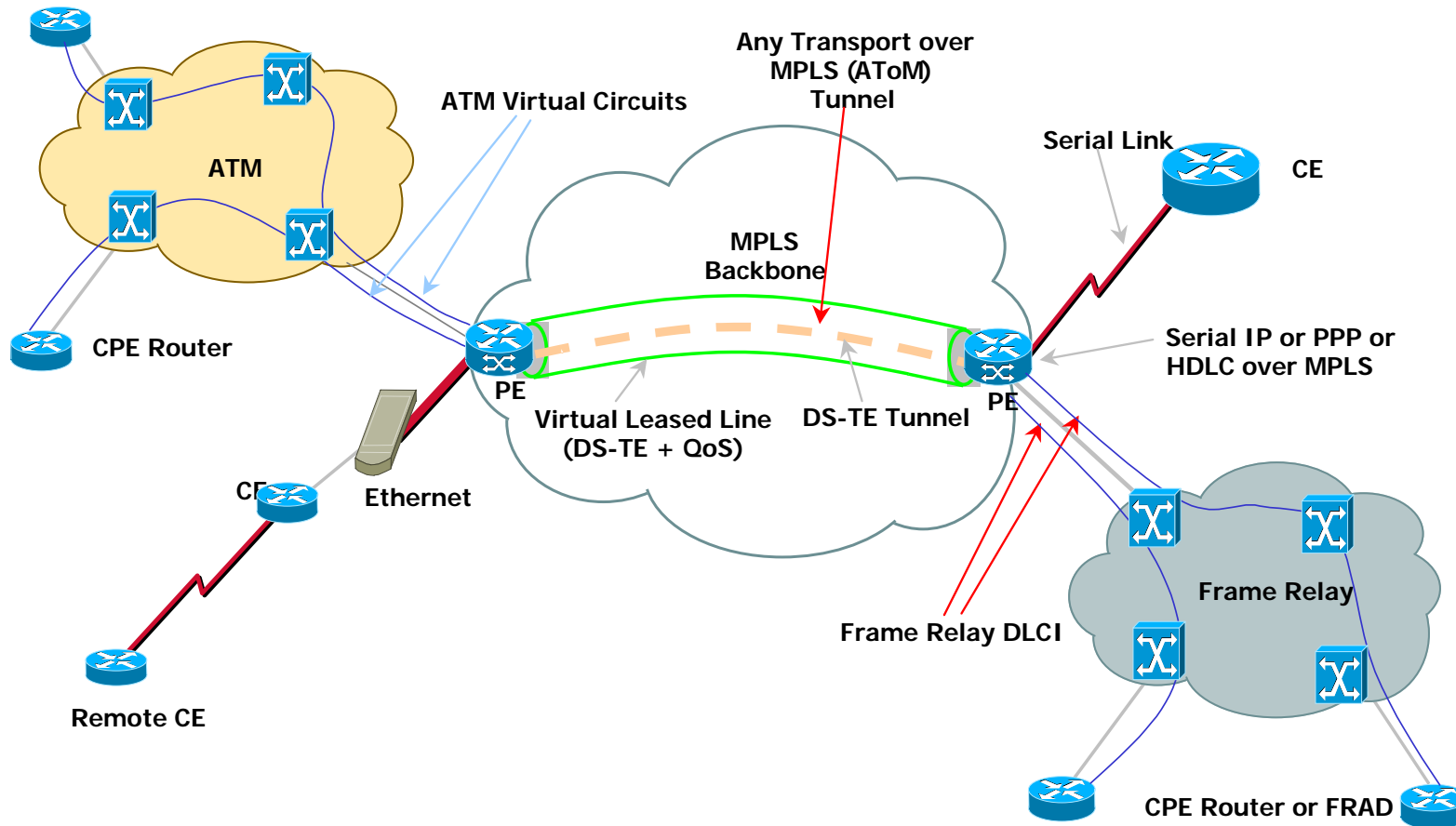
Solution 5: Virtual Leased Lines – FR Networks



Solution 6: Virtual Leased Lines – ATM Networks



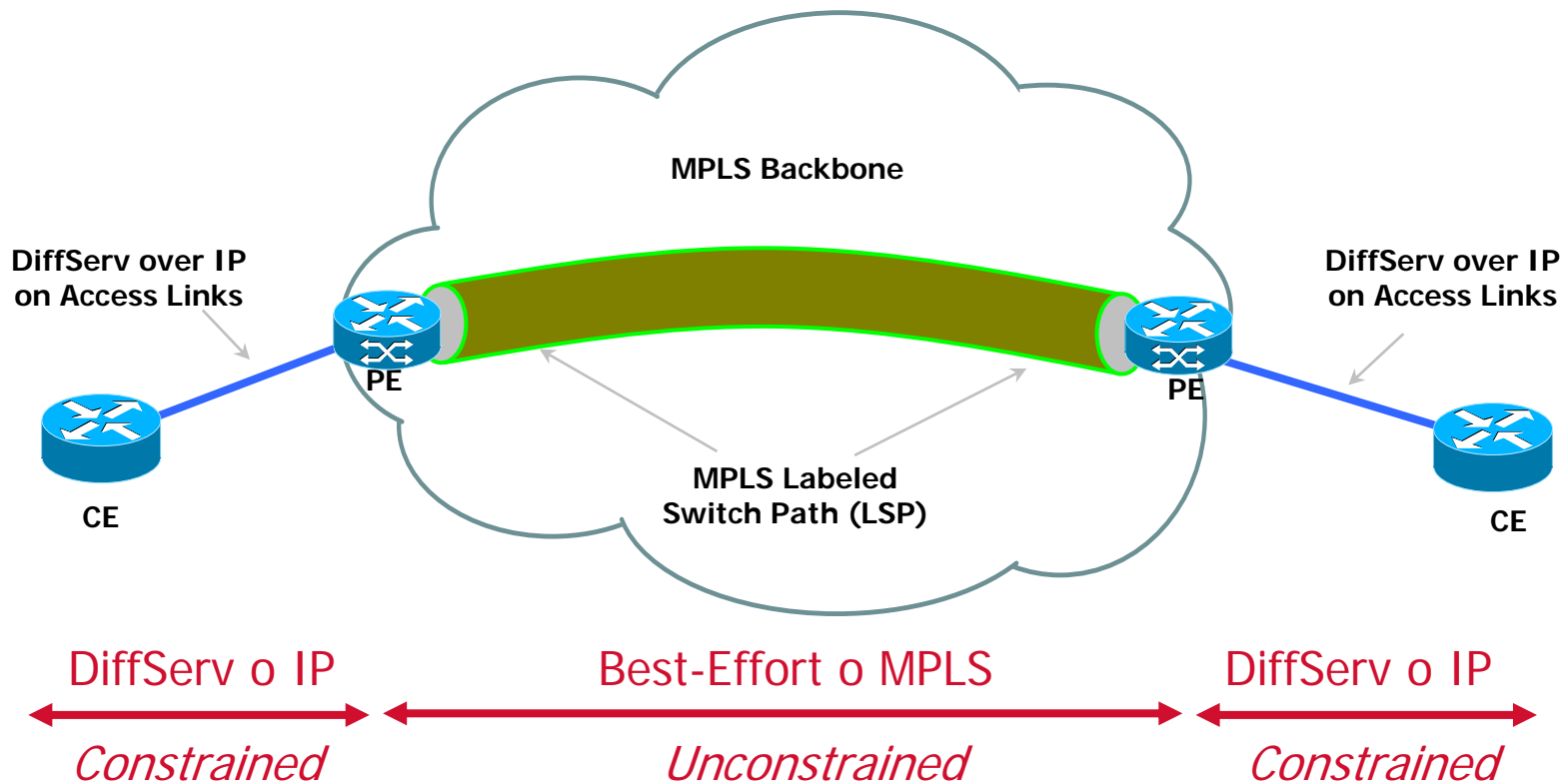
Virtual Leased Lines Summary



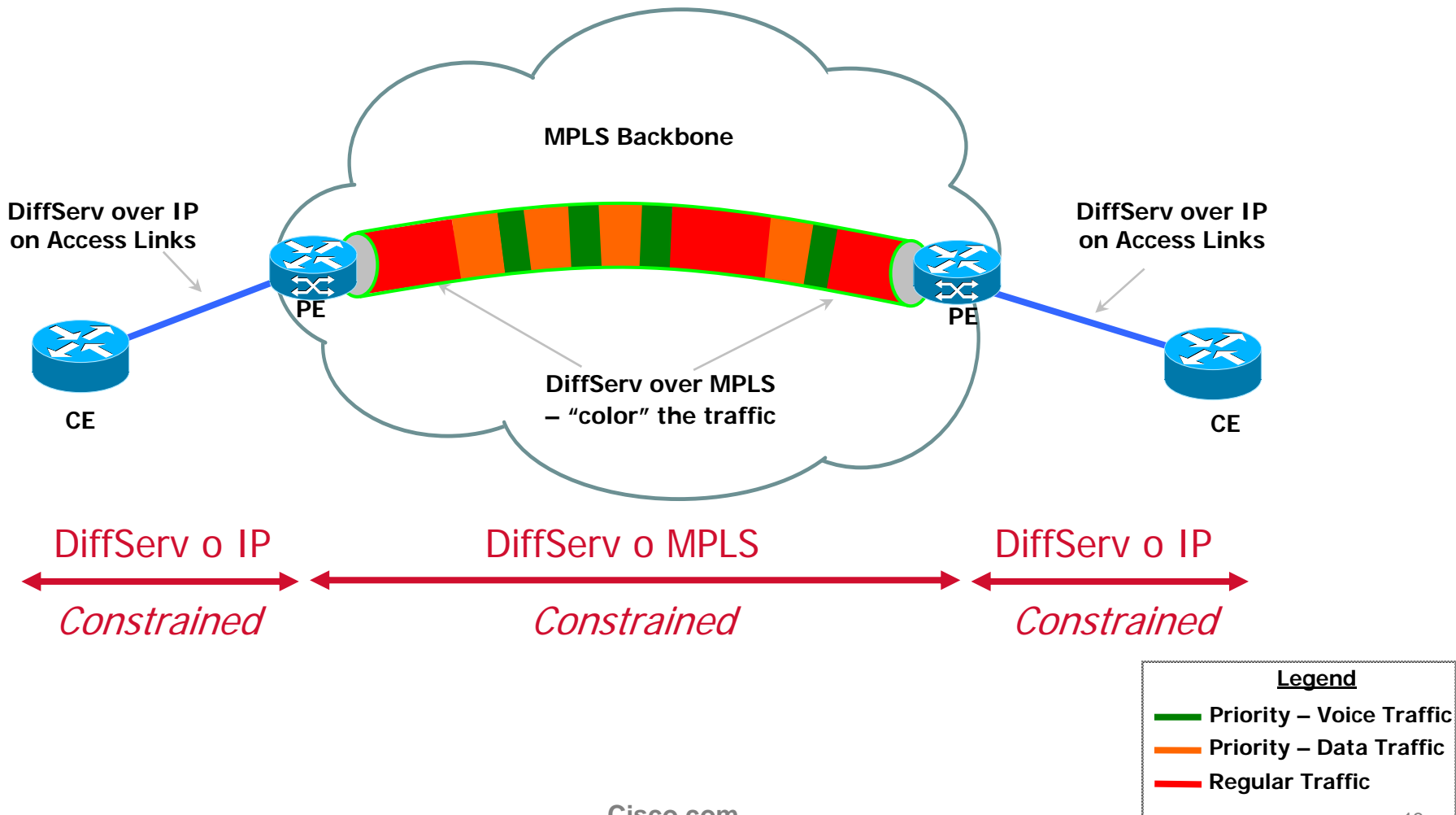
A man in a white shirt and dark tie is holding a long, curved pipe or cable against a blue background. The pipe is arched over his head, and he is looking down at it. The background is a textured blue surface.

The Road to a QoS- Optimized Backbone

Road to a QoS-Optimized Backbone – Step 1



Road to a QoS-Optimized Backbone – Step 2



Road to a QoS-Optimized Backbone – Step 3

