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# DATA PATH ENHANCEMENT AND VALIDATION

for a Network Equipment Manufacturer



**Services:** Product Engineering & Innovation, Network Transformation, 5G

## OVERVIEW

Customer is a **\$300mn** US Multinational, Software based Telecommunication Networking Provider. Customer wants to enhance the functionality of control plane and user plane separation architecture of EPC nodes.

## CHALLENGES



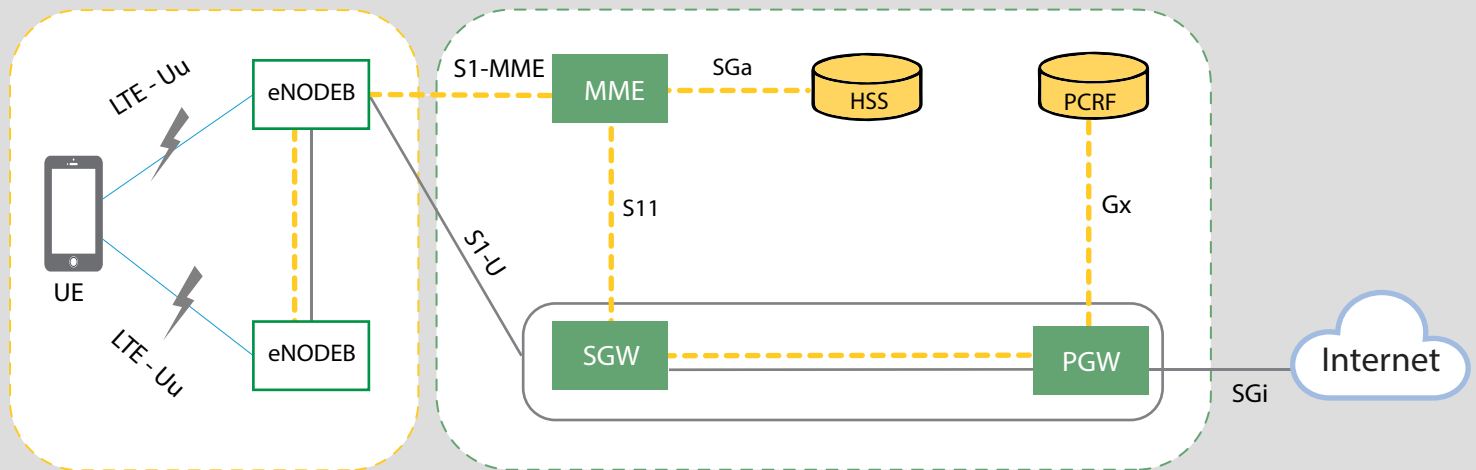
Not being able to create new services on Mobile network due to Scalability limitations of packet core Gateway



Delay in the network deployments as Mobile Network is not supporting the bandwidth-intensive services

## SOLUTION

- 1 L2TPv2 Tunneling between P-GW and PDN
- 2 GTPU and L2TPv2 Tunneling Control and Fast/User Plane features on VPP platform
- 3 Fast path manager/agent implementation for control to fast plane communication based on VPP binary interface
- 4 DPI, Charging, Rule matching (e.g. 1. SDF derivation and PDR matching). QER processing in Fast Path
- 5 4G and 5G feature testing on Local Test Bed and Spirent Setups



## OUTCOMES

- Optimization of control to fast path communication by leveraging VPP platform using shared memory
- Feature implementation based on Control and User Plane Separation (CUPS architecture) of EPC nodes