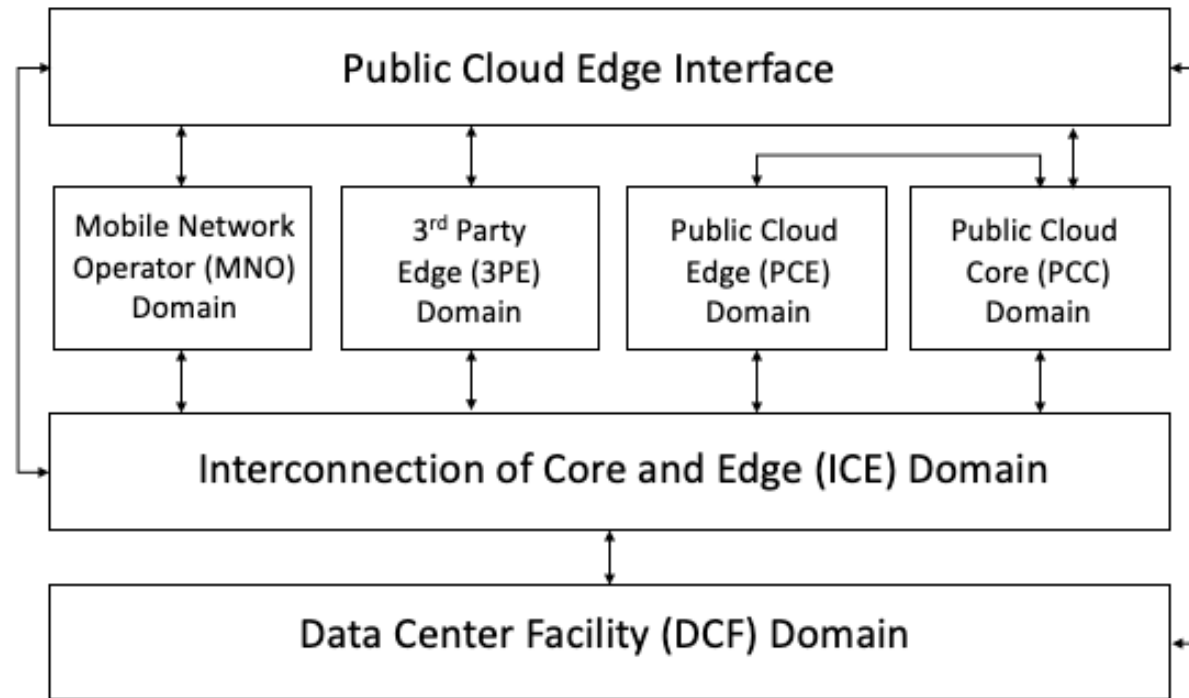# Public Cloud Edge Interface
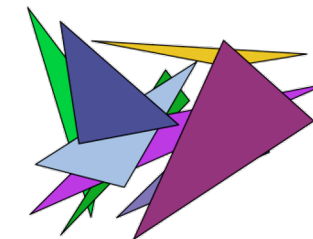
Overview
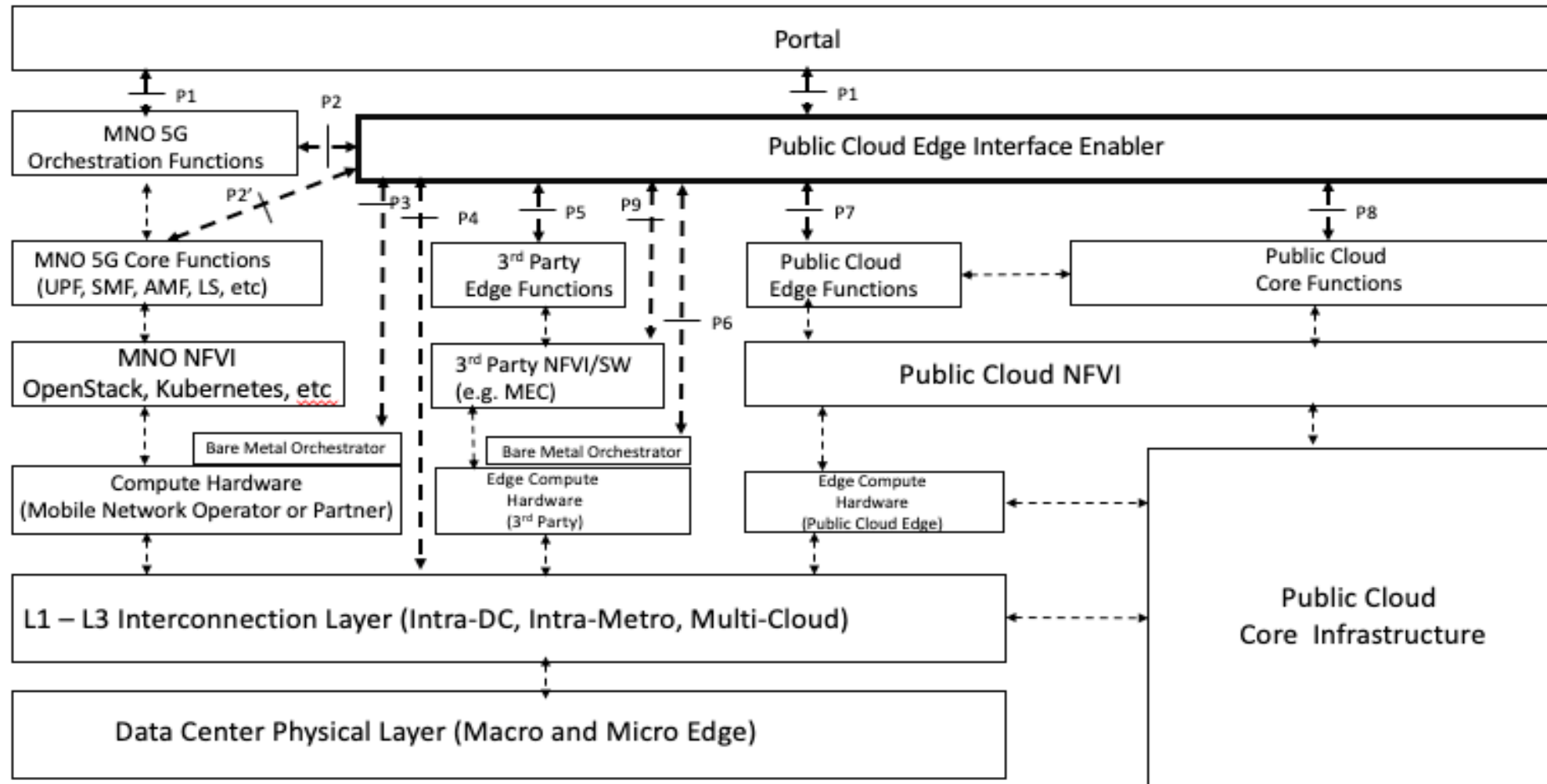
PCEI Overview

› The purpose of Public Cloud Edge Interface (PCEI) Blueprint family is to specify a set of open APIs for enabling Multi-Domain Inter-working across functional domains that provide Edge capabilities/applications and require close cooperation between the Mobile Edge, the Public Cloud Core and Edge, the 3rd-Party Edge functions as well as the underlying infrastructure such as Data Centers, Compute hardware and Networks.
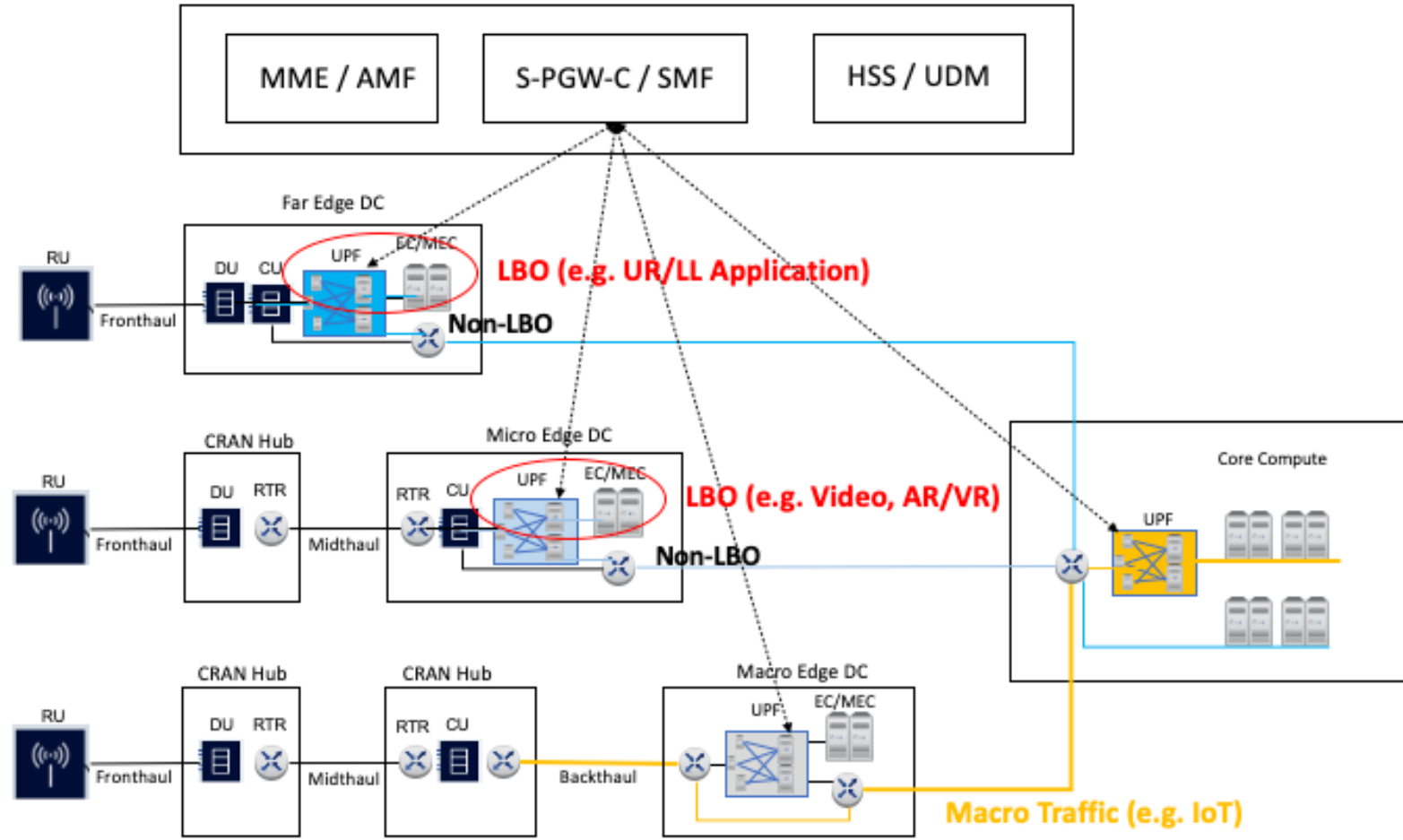
PCEI Reference Architecture

PCEI Use Cases

› Traffic Steering/UPF Distribution/Shunting capability -- distributing User Plane Functions in the appropriate Data Center Facilities on qualified compute hardware for routing the traffic to desired applications and network/processing functions/applications.

› Local Break-Out (LBO) – Examples: video traffic offload, low latency services, roaming optimization.

› Location Services -- location of a specific UE, or identification of UEs within a geographical area, facilitation of server-side application workload distribution based on UE and infrastructure resource location.

› QoS acceleration/extension – provide low latency, high throughput for Edge applications. Example: provide continuity for QoS provisioned for subscribers in the MNO domain, across the interconnection/networking domain for end-to-end QoS functionality.

› Network Slicing provisioning and management - providing continuity for network slices instantiated in the MNO domain, across the Public Cloud Core/Edge as well as the 3Rd-Party Edge domains, offering dedicated resources specifically tailored for application and functional needs (e.g. security) needs.

› Mobile Hybrid/Multi-Cloud Access - provide multi-MNO, multi-Cloud, multi-MEC access for mobile devices (including IoT) and Edge services/applications

› Enterprise Wireless WAN access - provide high-speed Fixed Wireless Access to enterprises with the ability to interconnect to Public Cloud and 3rd-Party Edge Functions, including the Network Functions such as SD-WAN.
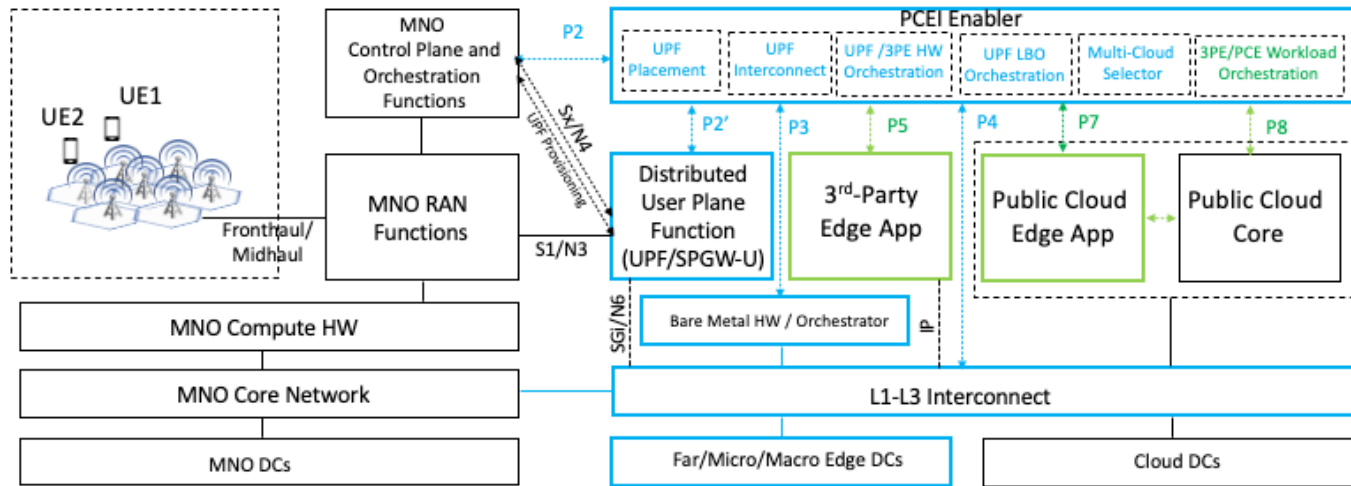
› Distributed Online/Cloud Gaming.

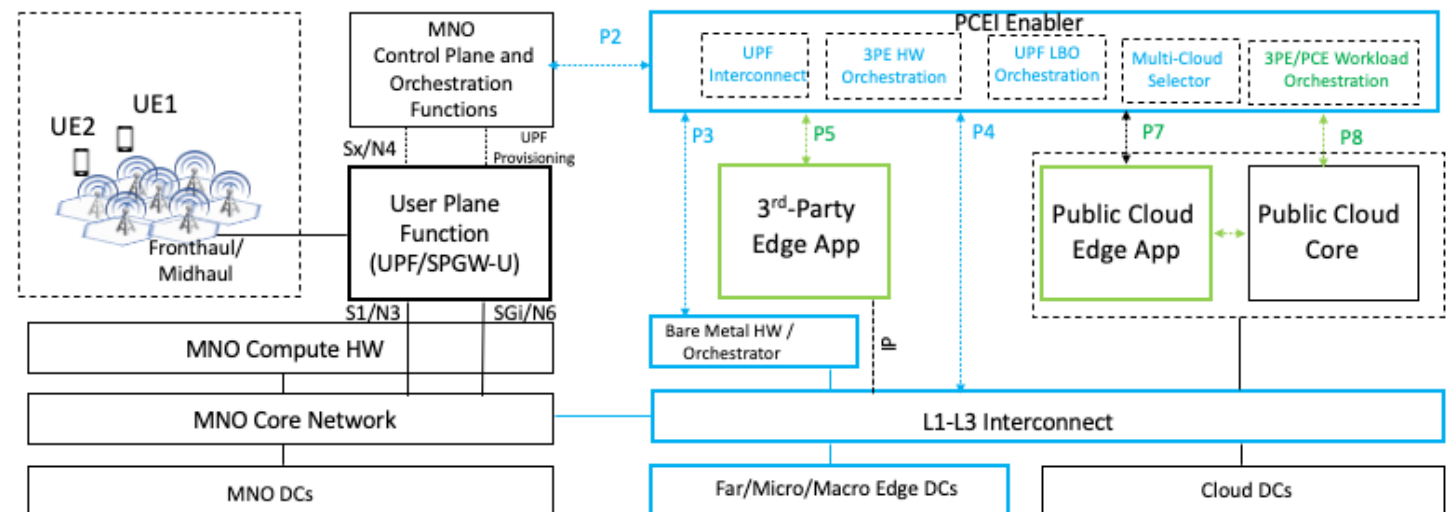# User Plane Function and Edge Compute Distribution
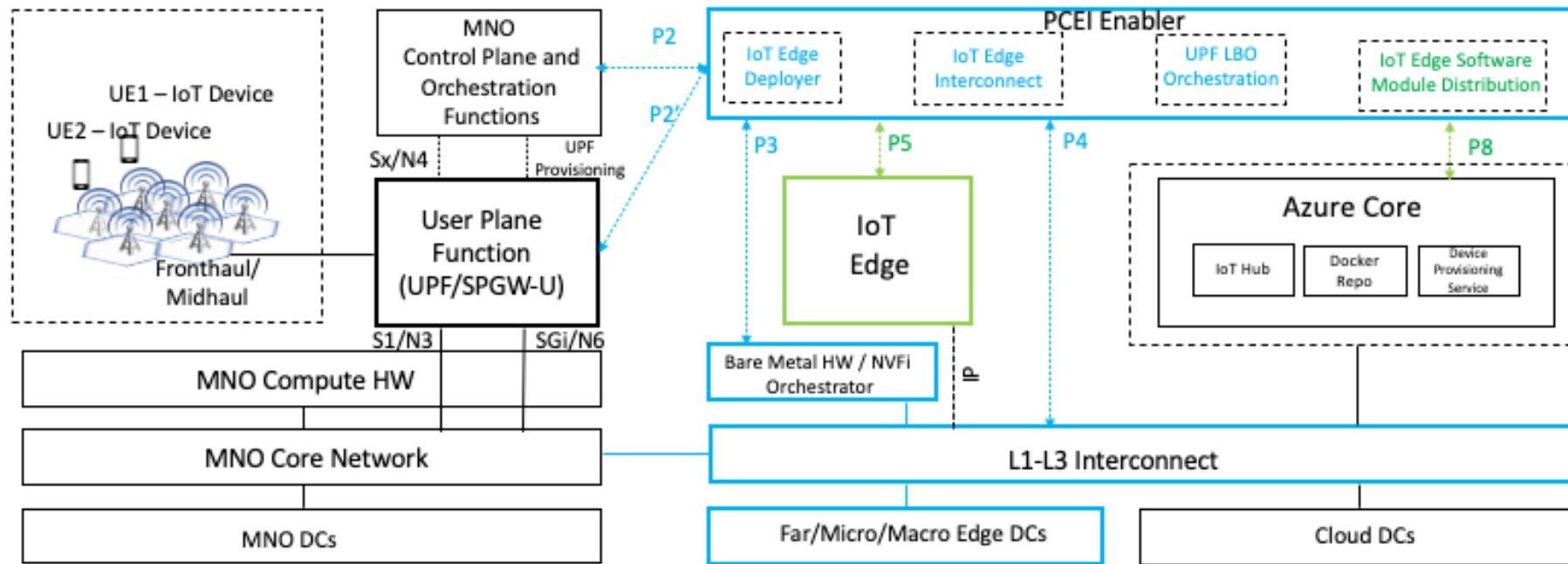
UPF Use Cases

PCEI Facilitated UPF Placement

PCEI Facilitated UPF Interconnect

Azure IoT Edge Demo (9/24/20 11-11:20 PT)

PCEI Documentation

› The following Wiki pages contain PCEI documentation

- [PCEI Architecture Document](#)

- [PCEI Use Case Development](#)

- [PCEI Blog](#)

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