

# Open Source for Telco-Cloud: An ETSI SDG-based solution to facilitate zero-touch, multi-slice 5G deployments across the cloud-edge continuum



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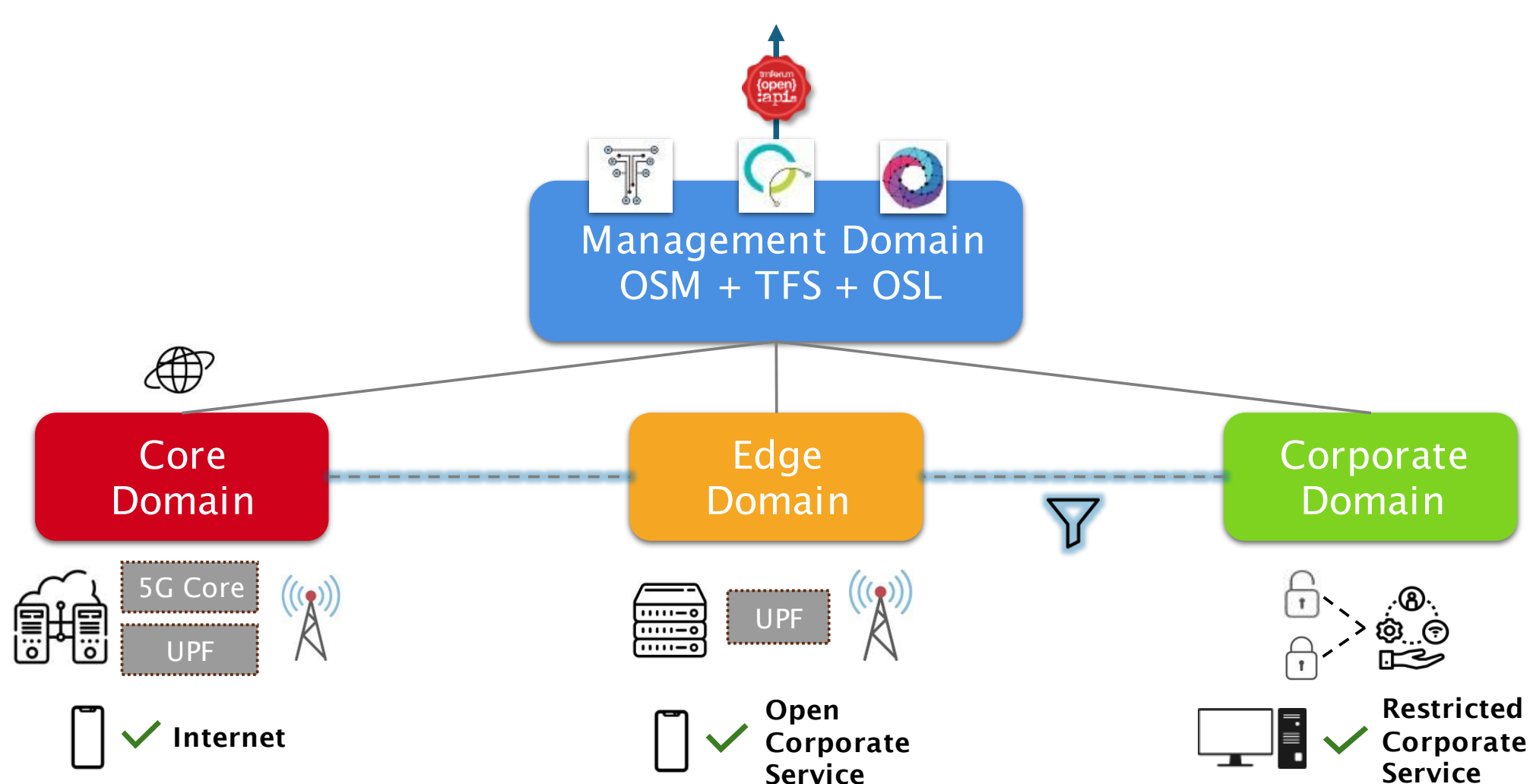
## Introduction

The increasing demand for network services has prompted telecommunications companies (telcos) to modernize their legacy and unadaptable infrastructure and adopt modular and scalable software-defined systems running on common off-the-shelf (COTS) servers. This software-defined cloud infrastructure, known as “telco cloud”, allows telcos to swiftly deploy services, adapt to changes in the network demand and manage resources across the cloud-edge continuum.

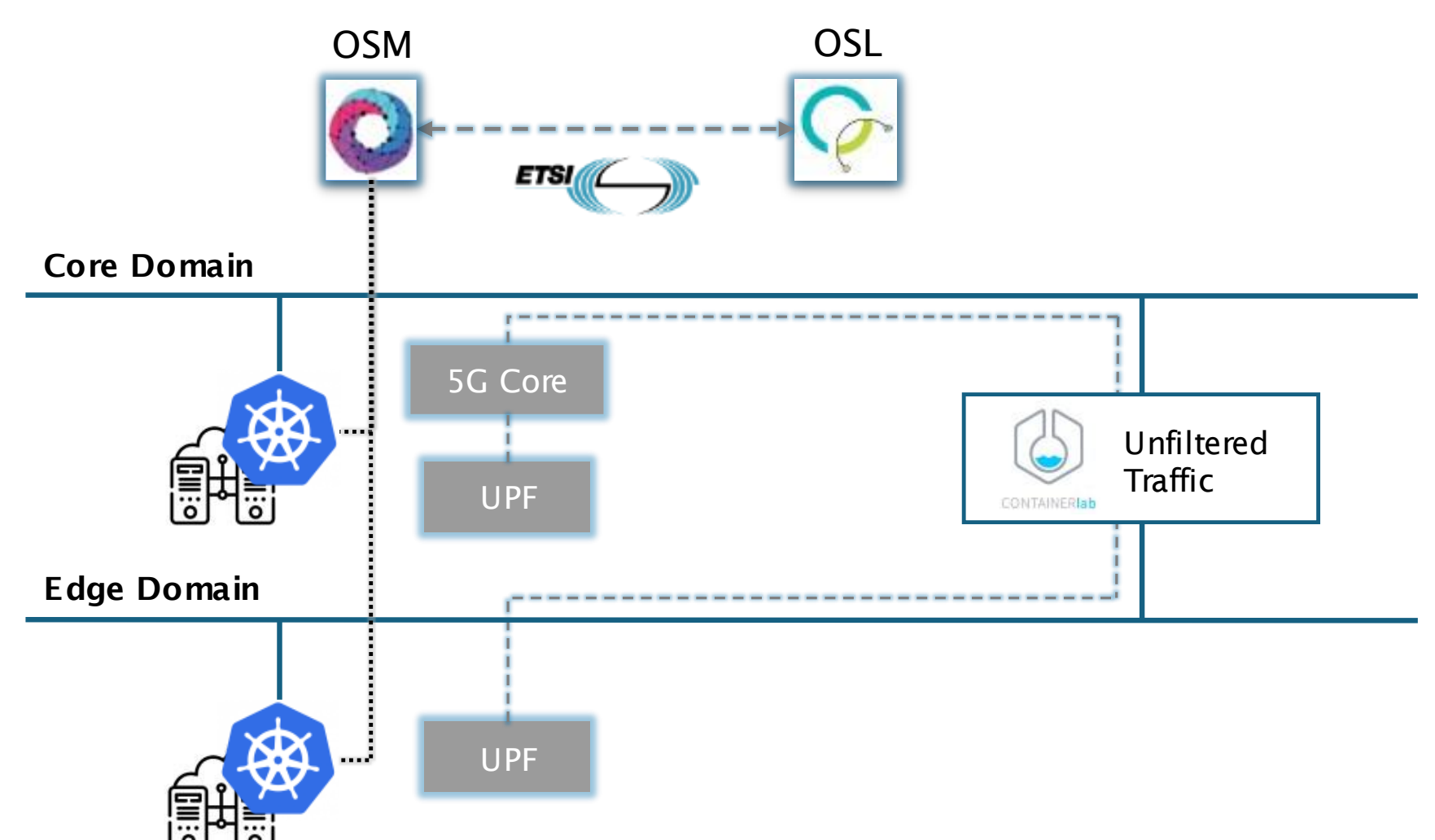
## Open-Source solution based on ETSI SDGs

The proposed demonstration illustrates a **zero-touch delivery of a distributed 5G network** across a cloud-edge continuum over multiple cloud providers, by **integrating three open-source solutions of ETSI Software Development Groups (SDGs)** - OSM, TFS, and OSL. It involves the logical interconnection of **public and private resources** providing an adjustable and seamless network fabric, as well as the employment of **stratum-based, programmable P4 switches** to not only carry out the routing and access control but also perform in-band network telemetry (INT) monitoring for deep visibility into the network state. The solution relies on widely utilized **industry standards** such as TMF, IETF and ETSI.

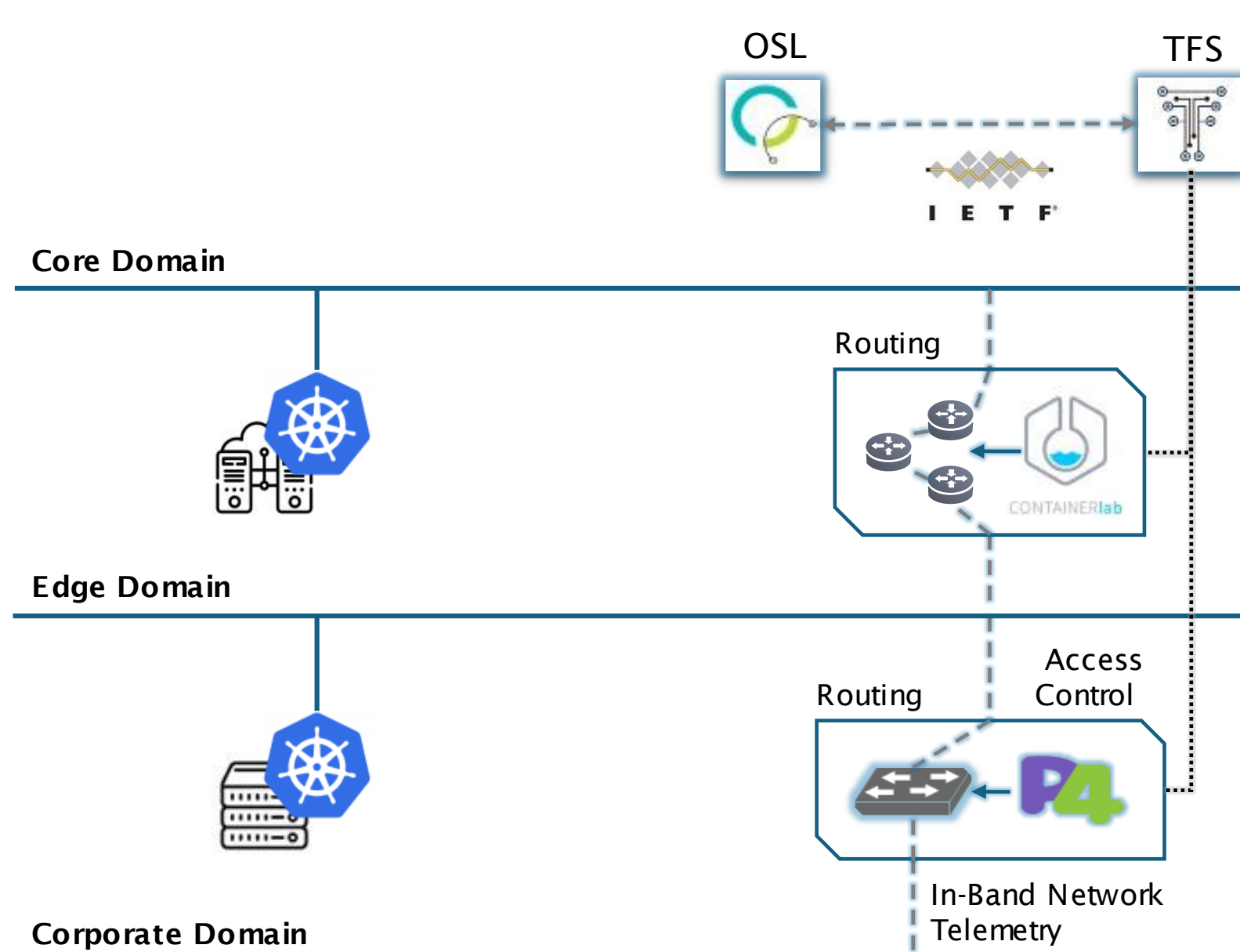
## High-Level Architecture



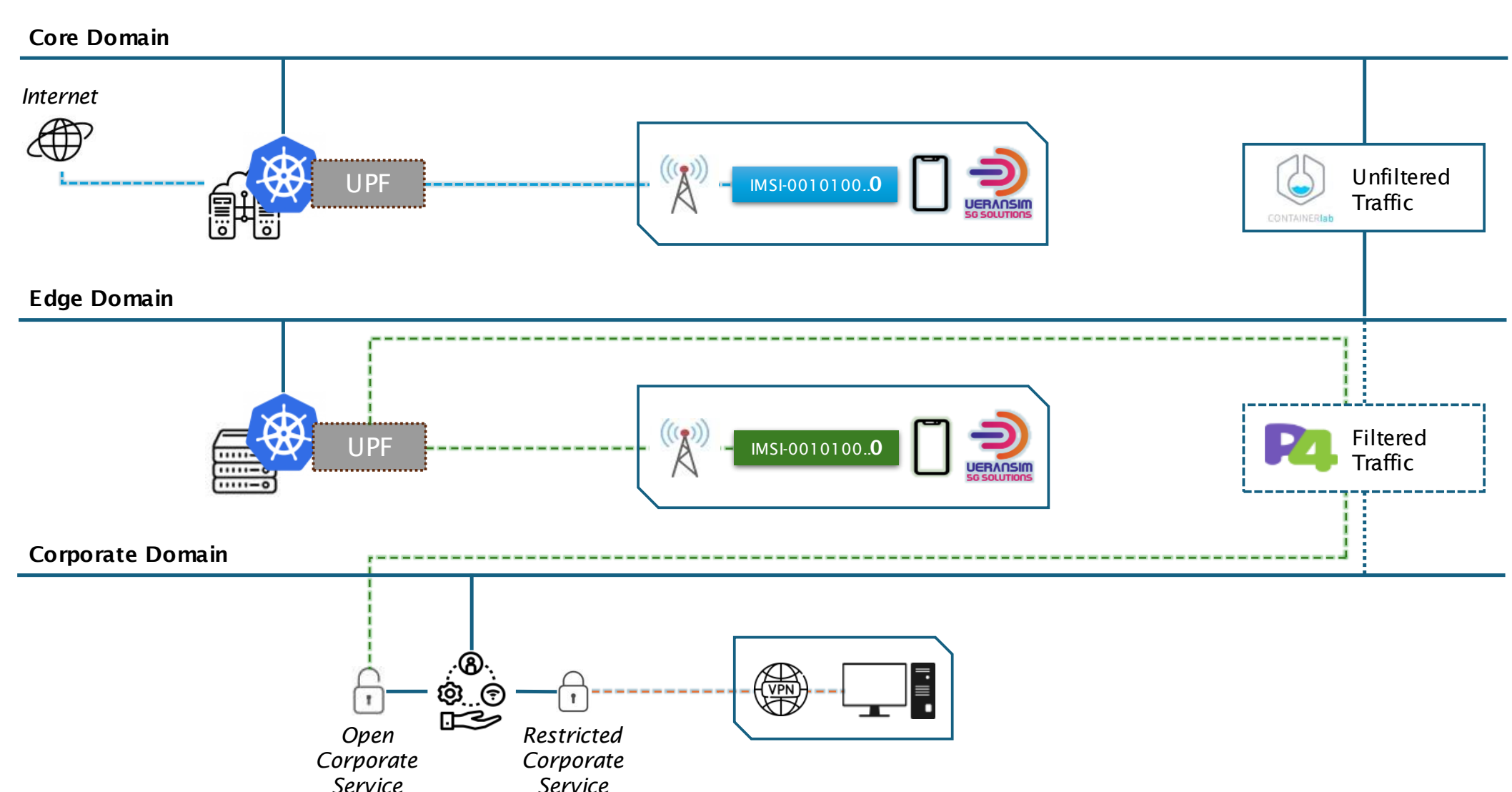
## Disaggregated 5G orchestration



## Network Fabric & Telemetry



## Service Access



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