



# Case Study: OTC CaaS

## CHALLENGE

The telco vendors' vertically integrated model poses a significant risk to our digital transformation efforts, potentially slowing down progress. Additionally, the unpredictable pricing strategies of these vendors, who may initially sell at a loss but seek to recover costs later, create financial uncertainty.

In many regions, there is an urgent need to renew critical platforms—such as SDM, Signaling, Charging, and Policy—between the second half of 2024 and 2026, driven by capacity constraints, end-of-support timelines, and site transitions.

This scenario presents a unique opportunity to transition to a Cloud-Native architecture, positioning our network for 5G Standalone (5G-SA) capabilities, all without incurring substantial additional costs.

## SOLUTION

We have successfully deployed a comprehensive technical solution across several countries in the Middle East and Africa, utilizing Orange Telco Cloud (OTC) to host a variety of containerized network functions, including SDM, signaling, and policy. OTC, an industrial-grade implementation based on the Sylva framework, offers a robust and scalable infrastructure tailored for these critical network functions.

Each country's deployment is strategically built on a Container as a Service (CaaS) model over Bare Metal infrastructure, distributed across two separate data centers. This dual data center approach ensures high availability and resilience, meeting the rigorous demands of network function hosting while delivering optimal performance and reliability for our services in the region.

OTC is commercially supported by SUSE's Adaptive Telco Infrastructure Platform (ATIP), which delivers enterprise-level support to the cloud, reinforced by a telco-grade SLA. With ATIP, Orange Telco Cloud can further optimize its cloud operations while upholding its open source strategy and benefiting from a diverse ecosystem of open source technologies.

“Orange invests massively in the Sylva project because we are all convinced that:

**#1** it is of paramount importance for telcos to keep control over the telco cloud as this is a strategic asset and

**#2** Telco Cloud is a commodity for all the players in the Telco industry. Hence it is only natural to go for an open source project.”

- STÉPHANE DEMARTIS,  
ORANGE



# Sylva Case Study: OTC CaaS

## RESULTS/BENEFITS

- Unified Hardware & Software Sourcing Strategy
- Cost Efficiency through Mutualization
  - Achieved significant CAPEX savings, with reductions ranging from 30% to 50% observed in Europe.
  - Optimized operational skill sets across regions, contributing to a 30% lower operating cost in a horizontal model compared to a traditional vertical model.
  - Mutualization benefits increase as more Virtual Network Functions (VNFs) are deployed.
  - Realized 30% to 55% savings in the number of servers required on Orange Telco Cloud (OTC) compared to vendor-specific vertical models across four Orange countries.
- Fast Track to L4 Autonomous Network
  - Deployed a fully automated technology stack, positioning us on a fast track towards L4 autonomous networking.
  - OTC's compliance with GitOps NF lifecycle management ensures streamlined operations.
  - Leveraged the Integration Center for Network Function (NF) validation and automation, enabling "automate once, deploy anywhere" capabilities.
- Enhanced Time to Market (TTM)
  - Additional network functions (NFs) require only infrastructure extensions, enabling faster deployment.
  - Flexibility through a multi-vendor strategy, hardware reuse, and simplified vendor swaps, further accelerating TTM.
- Enhanced capabilities to manage CO2 emissions per NF, contributing to a more sustainable network infrastructure.

“We are thrilled to support Orange Telco Cloud in its journey toward optimizing cloud operations and embracing the power of open-source innovation. With SUSE’s Adaptive Telco Infrastructure Platform (ATIP), we are confident that Orange will not only enhance its network capabilities but also continue to lead the industry with a forward-thinking, open-source strategy.”

- RICHARD CARD,  
GLOBAL HEAD OF TELCO, SUSE