

ENHANCED INTERNET

The best solution for an international connection

The capillarity and cost of an Internet Access, with the guarantees of a MPLS network.



MARKET CONTEXT

Multinational companies and its networks are undergoing a **profound transformation**. These changes are driven by three main aspects: most organizations have adopted multiple clouds, SaaS implementation and the widespread adoption of hybrid work.

This transition involves shifting from **traditional private network (MPLS) connectivity to the public internet** for accessing cloud-based applications. However, this shift brings about **several challenges**, including cost control, security, network adaptability, and application performance.

OUR PRODUCT

Imagine a stable Internet connection **without risks of data packet loss or attacks on your international traffic**. That is Enhanced Internet: the capillarity and cost of an Internet Access, with the guarantees of an MPLS network. Enhanced Internet simplifies networking by offering a mix of cost-effectiveness and reliability. It's like **getting the best of both worlds**.

Enhanced Internet has been **designed to make as easy as possible the use of International VPNs**. It allows you to connect to our international network through DIA (Dedicated Internet Access) or Broadband access using IPSec tunnels, maintaining the advantages of a headquarters directly connected to the Internet but routing part of the business traffic through Telefónica's VPNIP network.

Everything starts with Telefónica own PoPs

And because it is our Network we can streamline and prioritize what happens in it

Last Mile - Carrier Neutral

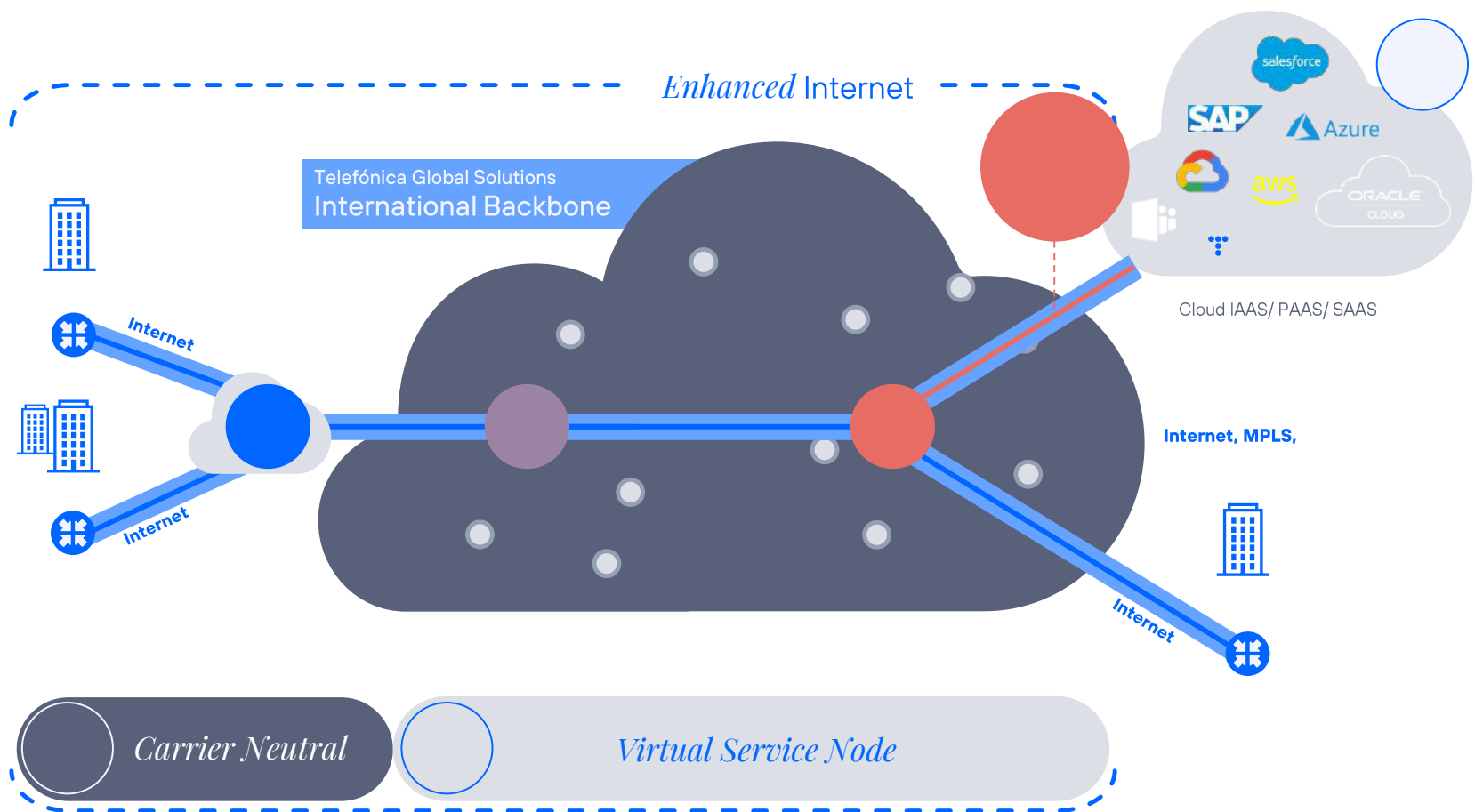
In terms of the last mile our value is based on:

- 14 Internet Break-Outs (TIER-1)
- More than 200 Local Access Partners
- Coverage in more than 170 countries (on-net and off-net)

Middle Mile - Virtual Service Node

- More than 100 PoPs worldwide
- 50 Connections to major CSPs
- 86 NFHs

- This let us offer Service Level Agreements (SLAs) that guarantee the level of service you pay for, from minimum bandwidth and capacity to 24/7 uptime.
- Enhanced Internet is intended to cover QoE, almost as a MPLS connectivity, over a broadband Internet connection.
- Local ISP ICXs are configured to exchange TGS and ISP routes in order to concentrate customer traffic in the Enhanced Internet Hubs.
- And the proof is in the performance. Enhanced Internet provides detailed reports including among others parameters like latency, round trip delay, jitter...



How does Enhanced Internet help?

This new hybrid connectivity model (Internet plus VPN) has many advantages over an internet-only connectivity:

- **Improved UX** thanks to a deterministic routing, avoiding the variability in terms of jitter, delay, packet loss.
- **Security:** traffic between sites and CSPs will have the guarantee of Telefónica network security.
- **Direct and private access to main CSPs** managing the e2e communication.
- **Cost efficiency:** the customer can tailorize the type of Internet access to be used.
- **Connectivity:** Lower latency submarine cables, Tier1 Internet connectivity and high redundant architecture guarantees the best connectivity for our clients.
- **Automatic rerouting:** 5 years of SDN-PCE controller rerouting automatically 100% of IPv4 & IPv6 tunnels as well as rerouting traditional VPN services.
- **Automatic enhanced connectivity:** Segment Routing deployed and connected to SDN-PCE provides MNC customers with enhance services: Disjoint paths, very low latency routes and very high convergence (TI-LFA).
- **Automatic operation:** Auto-recovery: Self healing capabilities; Auto-configure: Automated configuration and provisions, as well as software upgrades; Auto-ticketing: Automated ticketing opening.