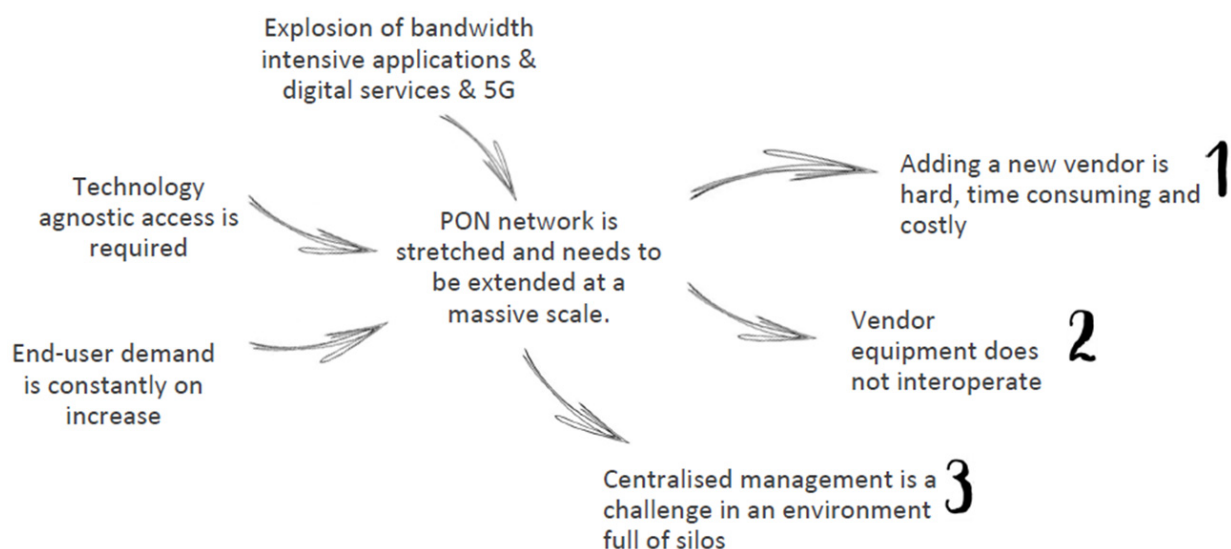# Iskratel SDA (Software-Defined Access) Solution

For more than seven decades, Slovenia's Kontron has been empowering service providers to provide their customers the services precisely when needed. We did it together, hand in hand. The journey was long, and the goal was achieved. Our solutions have always been open, with no lock-in hidden or intended.

Today is no exception. Kontron's Iskratel SDA (Software-Defined Access) solution empowers you to take charge of advancing the network, reducing the time it takes to generate revenue, streamlining service delivery, and enhancing network robustness.

TODAY'S CHALLENGES FOR THE OPTICAL NETWORK

Operators are under constant pressure to meet the demands for introducing new technologies, to deliver high-quality services while rapidly introducing new services. In addition, they are challenged to work with devices from various vendors without interoperability, flexibility and agility.

Explosion of bandwidth intensive applications & digital services & 5G

Technology agnostic access is required

End-user demand is constantly on increase

PON network is stretched and needs to be extended at a massive scale.

1. Adding a new vendor is hard, time consuming and costly

2. Vendor equipment does not interoperate

3. Centralised management is a challenge in an environment full of silos

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Next-generation broadband access

Complete portfolio of solutions and products

Exceptional functionality at an unbeatable TCO

ISKRATEL SDA SOLUTION AS A RESPONSE TO THE CHALLENGES

Iskratel SDA solution leverages a modern microservices-based architecture with an open-source SDN (Software-Defined Networking) controller and open APIs. The solution features a northbound service-oriented interface to existing OSS/BSS systems. Furthermore, it serves as a conduit to future network-automation platforms, irrespective of the vendor, platform, or technology.

- Open-source, cloud-native, vendor-agnostic and future-proof platform based on SDN.
- Virtualisation and network disaggregation with a centralised single point of management.

Iskratel SDA solution is developed for operators to transform, virtualise and disaggregate their access networks utilising the SDN principles. It comprises a centralised SDN controller, PON OLTs and ONTs.
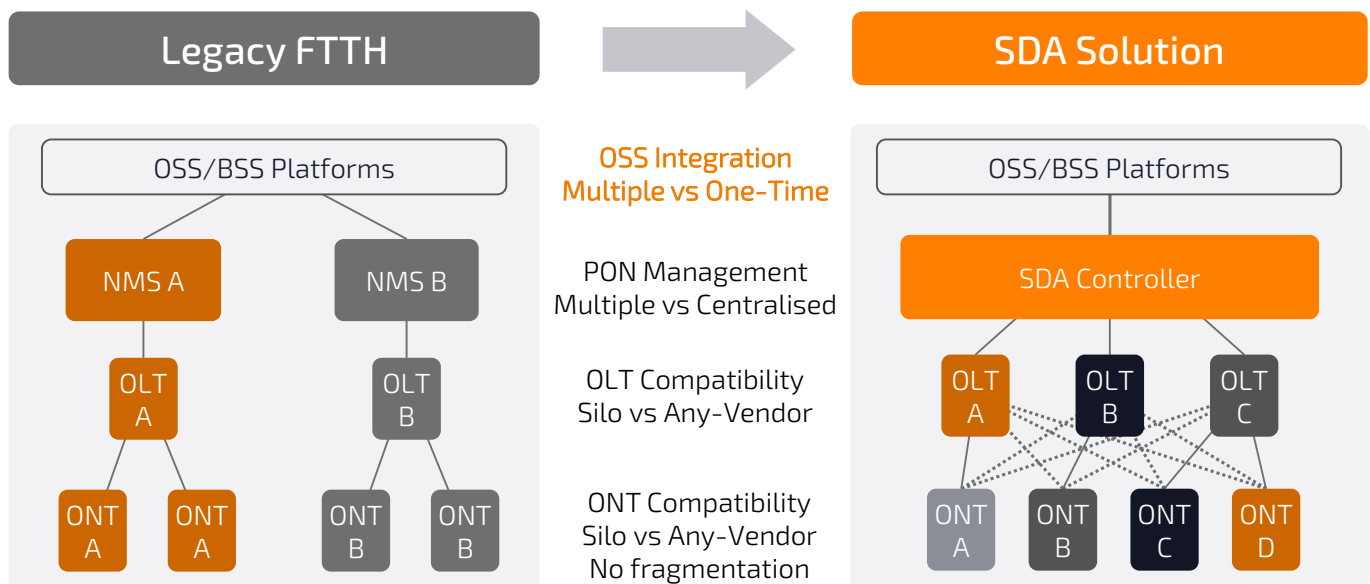
Iskratel SDA solution is based on Open Networking Foundation (ONF)'s SDN Enabled Broadband Access (SEBA) open-source project, providing a stable and production-ready SEBA distribution with advanced features and long-term support. While being compliant with the ONF SEBA architecture, Iskratel SDA solution embraces Broadband Forum (BBF) specifications, supporting BBF southbound interfaces as specified with TR-413 and TR-451. That way, Iskratel SDA solution works with both white-box and grey-box OLTs that support ONF SEBA interfaces, and BBF-native OLTs that provide interfaces defined by BBF.

Iskratel SDA solution is built on standards-based foundation and enables the operators to introduce various vendors' devices with ease, keeping them free from vendor lock-in, while facilitating a healthy competition within the device ecosystem. With microservices-based, cloud-native virtualisation, the solution enables operators to deliver innovative services at a faster pace to meet market demands.

The benefits of such architecture are proven with leading Tier-1 operators that experience significant gains and reduced Capex and Opex. Other operator benefits include shorter time to market, network slicing, service innovation, support for fixed-wireless convergence, and mobile backhaul.

KEY FEATURES

- Fast introduction of technology via a single and unified Northbound Interface (NBI) for multi-vendor devices or technologies; no more vendor silo applications with huge integration effort needed.
- Vendor- and integrator-independent environment, with no vendor lock-in.
- Supports white-box OLTs that run ONF SEBA software, grey-box OLTs with ONF SEBA interfaces, and BBF-native OLTs that provide interfaces as per TR-413 and TR-451.
- No operator effort for OSS/BSS integration to support the introduction of new (types of) devices.