

M&A Technical Due Diligence

De-risking TMT acquisitions as the industry forklifts to SRv6 & Open NOS

MANAGEMENT CONSULTING / RISK MANAGEMENT

Executive Summary

SRv6 TEK Innovations delivers intensive, time-boxed technical due diligence sprints purpose-built for Private Equity and Venture Capital firms evaluating Technology, Media, and Telecommunications (TMT) acquisition targets. Our engagements identify hidden technical debt, architectural fragility, and protocol obsolescence risk before capital deployment—safeguarding your 5-year fund exit valuation.

"We identify the technical risks your financial model cannot price—single points of failure, open-source integration gaps, and protocol obsolescence that erode your exit valuation."

Why SRv6 Is the Defining Infrastructure Shift for VC & PE

The entire telecom and cloud networking industry is in the middle of a generational forklift migration to SRv6 with Open NOS and white-box disaggregated hardware. Understanding this transition—and whether a target asset is positioned ahead of, aligned with, or behind it—is now a prerequisite for sound TMT due diligence. Key dynamics your IC must understand:

- SRv6 (Segment Routing over IPv6, RFC 8986) is the IETF-standardized successor to all legacy traffic-engineering protocols—RSVP-TE, LDP, and L3VPN BGP/MPLS—unifying the data plane into a single, programmable IPv6 forwarding architecture.
- Every Tier-1 carrier (Verizon, AT&T, Deutsche Telekom, NTT, Softbank, China Telecom) and hyperscaler (Amazon, Google, Microsoft) has active SRv6 production deployments or committed roadmap migrations. The migration is not a future event—it is underway at scale.
- Open Compute Project (OCP) and Open Networking Foundation (ONF) have established white-box disaggregated hardware (Edgecore, UfiSpace, Delta) running Open NOS (SONiC, FRRouting, Stratum) as the default build-vs-buy answer for greenfield SP and hyperscaler networks.
- Incumbent vendors—Cisco, Juniper, Nokia, Arista, Ciena, Huawei—are all in different stages of pivoting to SRv6 as their primary TE control plane, with Cisco's momentum clearly leading the charge through IOS-XR production SRv6 uSID deployments and CNC controller. Roadmap alignment with SRv6 uSID (micro-SID, F3216 encoding) is becoming a

- procurement mandate for Tier-1 SP RFPs globally.
- Target companies still dependent on RSVP-TE, LDP, or proprietary TE overlay architectures carry material obsolescence risk: increased OpEx for dual-plane operations, inability to win Tier-1 SP contracts, and hardware lifecycle cliffs as vendors end RSVP-TE feature work.
 - Open NOS commoditization (SONiC on Broadcom Tomahawk/Trident, FRRouting on white-box) is structurally compressing switching hardware margins—PE-backed vendors in the incumbent NOS space face platform replacement risk within a 3–5 year fund horizon.
 - AI Data Center fabrics are the next major SRv6 deployment wave: SRv6 uSID L2/L3 VPN replacing VXLAN/BGP-EVPN for GPU-GPU rail fabrics, eliminating ECMP flow polarization hotspots that degrade AI training job completion times.
 - SRv6 TE-to-host via eBPF/Cilium and FRRouting on Linux makes the protocol natively Kubernetes-capable: uSID F321632 format (32-bit block + 16-bit uSID + 32-bit GIB for compute /64 locators) supports 4.2 billion container fabric prefixes—making SRv6 the architectural foundation of cloud-native networking.

Engagement Scope & Methodology

Week 1 — Architecture Audit	Deep-dive of target network topology, hardware BOM, software stack versioning, and open-source dependency graph (SONiC, FRRouting, ONOS/ODL). CVSS-scored vulnerability and lifecycle assessment.
Week 1 — Protocol & SRv6 Readiness	Evaluation of SRv6 uSID migration readiness, RSVP-TE debt exposure, Open NOS integration health, and white-box hardware substitution risk vs. opportunity analysis.
Week 2 — Risk Quantification	Technical debt mapping to financial exposure. SPOF analysis, capacity ceilings, vendor lock-in concentration scoring, and SRv6 transition cost modeling.
Week 2 — Roadmap Alignment	Cross-reference of target roadmap against IETF SRv6 standards trajectory, OCP white-box adoption curves, and competitive positioning of Cisco/Juniper/Nokia/Arista/Edgecore.

Engagement Deliverables

- Executive Red-Flag Risk Report — board-ready narrative with severity ratings and remediation cost estimates.
- SRv6 Transition Readiness Score — proprietary scoring model benchmarking target against industry migration timeline.
- Product Roadmap Market Alignment Matrix — scoring target's trajectory against IETF SRv6, OCP, and competitive landscape.
- Live 90-Minute Investment Committee Defense — principal-led Q&A; covering all technical findings and risk-adjusted valuation implications.

Pricing and Engagement Terms

Engagement Model	Scope	Investment
Standard Sprint	Single target, 2-week timeline, all deliverables	\$35,000–\$45,000
Complex Asset Sprint	Multi-vendor / multi-jurisdiction targets	\$45,000–\$50,000
Retainer Add-On	Post-closing 60-day integration advisory	\$8,000 / month

Download the attached SOW Briefing PDF for complete execution parameters. | Connect on LinkedIn to initiate a confidential scoping call.