# ENGINEERING CRITICAL NETWORKS

Secure • Smart • Resilient

# **SOLUTIONS HIGHLIGHTS**

CELENIUM®, established in 2009, **engineers** secure, smart, and resilient networks **bridging OEM innovation with operator execution**.

- Mission-Critical WANs: IP/MPLS backbones for airports, utilities, and defense systems.
- Private Wireless (4.9G/5G + Wi-Fi 6/7): Industrial mobility for mining, manufacturing, logistics, and education campuses.
- Optical & DC Interconnect: SR-Linux and fabric architectures for federal and enterprise data centers.
- Fiber Everywhere & POL: Secure, low-latency LAN and backbone design for transport and utilities.
- Zero Trust & Lifecycle Engineering: Compliance-ready design, segmentation, and hardening.

"Before Industry 5.0 can think, sense, and act — it must connect."

# **MARKET FOCUS**

- Airports & Public Safety: Mission-critical WAN, Zero
  Trust segmentation, POL + PW integration (FAA, TSA,
  DHS).
- Utilities & Energy: Grid-comms modernization (IP/MPLS + Fiber Everywhere) IIJA/IRA funded.
- Industrial & Manufacturing: Private Wireless and Edge automation for mining, plants, and logistics.
- Data Centers & Federal IT: Secure DC fabric and optical interconnect for enterprise and agency networks.
- Transportation & Education: Rail (FRMCS), Smart campuses (PW + Wi-Fi integration).

## WHEN CONNECTIVITY BECOMES CAPABILITY

Efficiency ↑ Predictive maintenance & digital twins

**Risk** ↓ Zero-Trust segmentation & industrial reliability

Cost | Unified architecture & lower OPEX

**Growth** → Scalable infrastructure for new sites & data loads

#### PERFORMANCE RESULTS

- · 75% time savings in network decommissioning
- 50% cost reduction in SD-WAN and HCI projects through technical due diligence
- 15% faster delivery via structured design reviews
- 100% multi-vendor compliance across 3GPP & CALEA
- Site handover cut from 6 months to 2 weeks in Oracle/AT&T migration

#### **PRIMARY NAICS CODES**

541512 - Computer Systems Design | 541330 - Engineering Services | 541519 - Other Computer Services | 334220 - Radio & Wireless Equipment Manufacturing

# **DIFFERENTIATORS**

- Mission-Aligned, Architecture-Driven Delivery results-focused, standards-compliant, and scalable.
- Trusted Collaborations supporting Nokia infrastructure programs and long-term Tier-1 modernization with Oracle: Sprint, AT&T, and others Documentation Excellence — clarity that drives sustainment and compliance.
- Agile with Enterprise-Grade Depth responsive small business with large-scale technical maturity.
- Recognized SBA 8(a) Advantage direct award and sole-source contracting capability.

Let's discuss how CELENIUM® can strengthen your next modernization initiative.

#### CONTACT

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## **Client Testimonial – Oracle**

"Ahmad is a top-tier engineer and solution architect who brings clarity, precision, and professionalism to every engagement." — **Hanan Dadon, Oracle** 

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