ADVaSol Distribucija d.o.o.

Mission Critical Communications

Engineering Consulting · Radio Planning · Critical Infrastructure
Tunnel Communication Systems · Railway Communications

Capability Statement

Version 1.0
Belgrade, Serbia
2026

WHO WE ARE

Engineering Precision for Critical Communications

Mission Critical Communication Systems require engineering precision, operational reliability and long-term thinking. ADVaSol provides independent engineering consulting for organizations responsible for planning, evaluating and improving communication systems supporting critical infrastructure.

Our work combines radio engineering, system architecture, operational understanding and technology advisory. Recommendations are developed independently of equipment manufacturers and technology vendors.

Areas of Expertise

- Railway Communications
- Road Tunnel Communications
- Radio Planning
- Coverage Analysis
- Communication Architecture
- Technology Advisory
- Operational Readiness
- Engineering Documentation

Key Principles

- Safety
- Availability
- Reliability
- Maintainability
- Scalability
- Interoperability

SERVICES

Supporting the Full System Lifecycle

Engineering Assessment

Evaluation of existing communication infrastructure — coverage, capacity, technology and operational suitability.

Radio Planning

Coverage prediction, propagation analysis, tunnel propagation considerations, site planning and optimization.

Tunnel Communication Systems

Concept development, engineering review, communication architecture, operational requirements and emergency communication considerations.

Independent Technology Review

Evaluation of alternative technologies, vendor-neutral recommendations, lifecycle assessment and risk analysis.

Technical Documentation

Engineering reports, technical specifications, assessment reports and independent reviews.

REPRESENTATIVE EXPERIENCE

Critical Transport Infrastructure

- Railway Tunnels — engineering activities on multiple railway tunnel communication projects in the Bor region.
- Highway Infrastructure — communication system engineering for tunnels on the Požega–Boljare motorway corridor.
- Montenegro — engineering participation in communication system projects associated with tunnels on the Virpazar–Župci corridor.
- Fruška Gora — engineering work related to the Iriški Venac tunnel communication system.

Additional references available upon request where confidentiality permits.

Engineering Capabilities

- Radio Coverage Assessment
- Propagation Analysis
- Communication Architecture Review
- Operational Communication Assessment
- Technology Evaluation
- Independent Engineering Review
- Risk Assessment
- Implementation Advisory
- Knowledge Transfer
- Engineering Documentation

OUR ENGINEERING APPROACH

From Operational Requirements to Validation

Operational Requirements → Infrastructure Assessment → Communication Requirements → Technology Evaluation → Engineering Recommendation → Implementation Support → Operational Validation.

Engineering Focus

- Safety.
- Operational continuity.
- Coverage.
- Availability.
- Maintainability.
- Interoperability.
- Lifecycle sustainability.

TECHNOLOGY EXPERIENCE

Vendor-Neutral, Standards-Aware

Experience includes engineering work associated with TETRA, Mission Critical Radio, LTE evolution, private radio systems, RF engineering, coverage planning, communication infrastructure, interoperability concepts, radio propagation analysis and network performance assessment.

Standards Awareness

Projects are developed with awareness of relevant international engineering standards and industry practices, including guidance from ETSI, 3GPP, IEC, ISO, CENELEC and UIC (railway context, where applicable). The specific standards applied always reflect the client’s technical, contractual and regulatory requirements.

WHY ADVASOL

Why Clients Choose Our Engineering Approach

- Independent engineering advice.
- Vendor neutrality.
- Practical infrastructure experience.
- Structured methodologies.
- Long-term operational perspective.
- Strong analytical capability.
- Engineering documentation.
- Knowledge transfer.

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Supporting reliable communications for critical infrastructure through independent engineering expertise.