

ENFRASYS

AI-Driven Transformation Powered By 5G

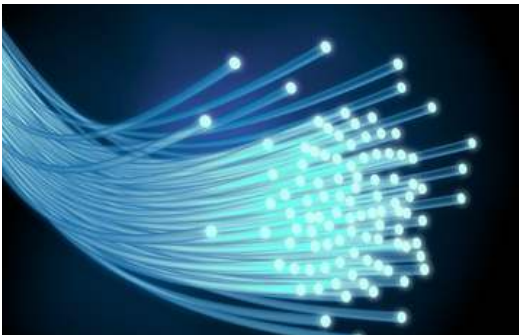




AI: Engine of Industry 4.0

Artificial Intelligence is reshaping industries — enabling automation, predictive insights, and real-time decision-making. But AI only delivers value when supported by the right environment: high upload bandwidth, low latency, and secure infrastructure. Without this, AI remains stuck in pilots, unable to scale into mission-critical outcomes.

WHAT AI NEEDS TO PERFORM



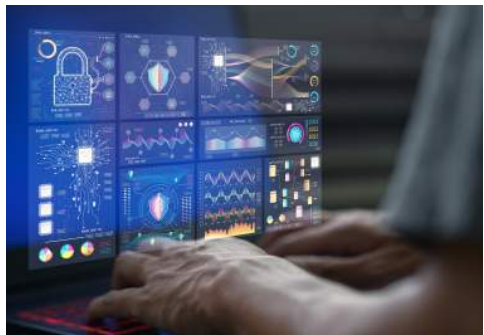
Bandwidth for data-heavy applications



Low latency for robotics and real-time control



Predictable performance for safety & compliance



Edge computing for instant analytics

Creating this environment requires more than generic connectivity. Enterprises need networks that are secure, predictable, and built specifically for their mission-critical operations. This is where Private Networks come in — providing the dedicated foundation that allows AI to scale confidently into Industry 4.0.

What is a Private Network?

A Private Network is a secure, dedicated system built for a single enterprise, giving it full control over performance, security, and customisation. Unlike shared networks such as WiFi or public networks managed by telecom operators, where multiple users and devices compete for network resources, Private Networks are purpose-built to support industry needs such as smart manufacturing, logistics, transportation, and critical infrastructure. 5G elevates these benefits with its high bandwidth and low latency capabilities, enabling AI, automation, and mission-critical operations at unprecedented speed and scale.

HOW AI + 5G PRIVATE NETWORKS WORK TOGETHER

AI delivers value only when it has the right environment: bandwidth, low latency, predictable performance, and edge computing. A 5G Private Network provides that foundation — enabling AI to move from pilots to real-time, mission-critical outcomes.

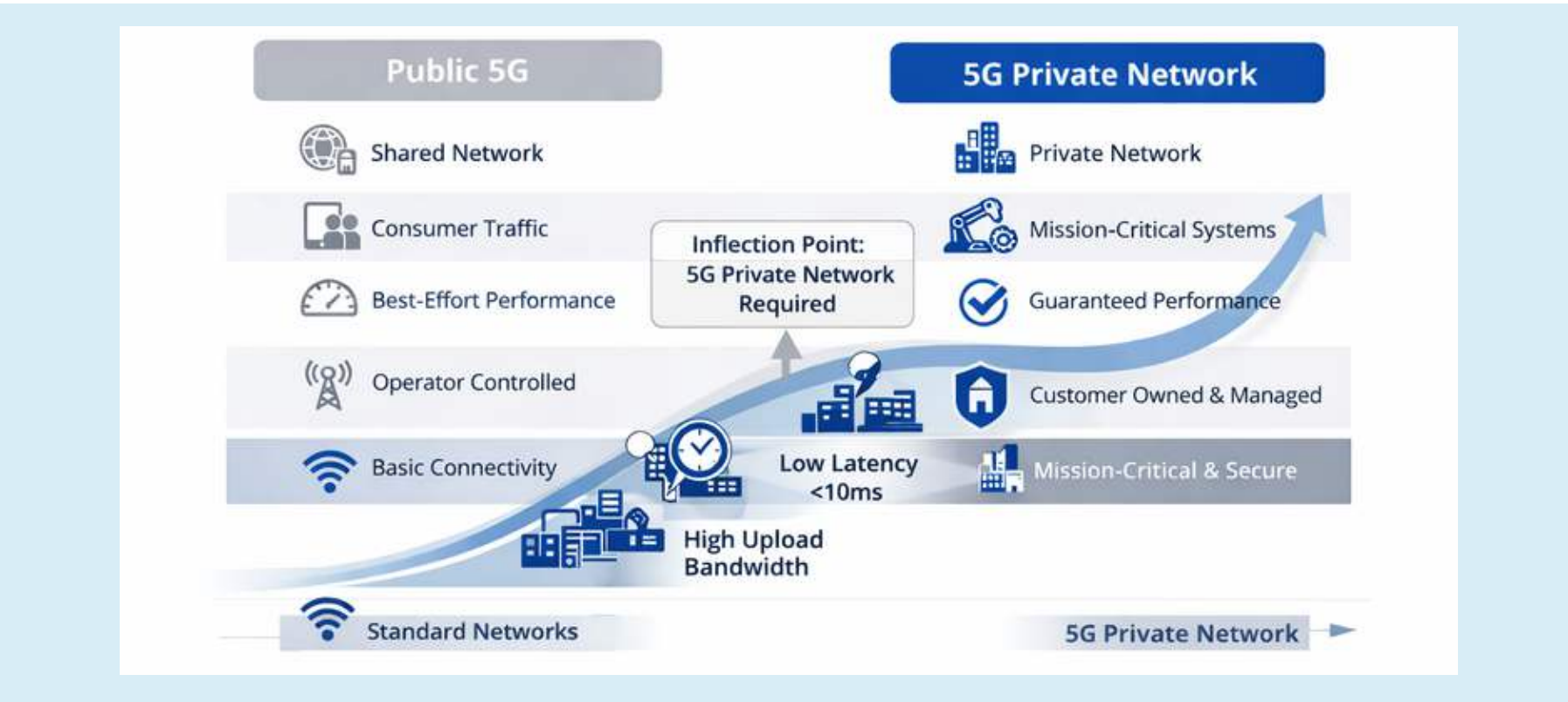


HOW A 5G PRIVATE NETWORK DELIVERS IT

- Dedicated spectrum ensures reliability
- Local control gives enterprises autonomy
- Enterprise-grade security safeguards sensitive data
- Scalability to adapt to Industry 4.0

Together, AI and 5G Private Networks unlock outcomes that were previously impossible — from instant machine control to predictive maintenance at scale.

WHERE SHARED NETWORKS FALL SHORT



Why Private Networks Matter

Industry 4.0 depends on real-time responsiveness, but legacy networks can't keep pace. Limitations in existing connectivity solutions such as Wi-Fi or public mobile networks cause downtime that drains productivity, leaves supply chains fragile, and disrupts analytics. Labour shortages intensify the need for automation, yet without the right infrastructure, adoption stalls — leaving critical processes manual and inefficiencies unchecked. These impacts compound, eroding competitiveness. A 5G Private Network closes this gap, providing the reliable, secure foundation for AI and automation to deliver at scale.

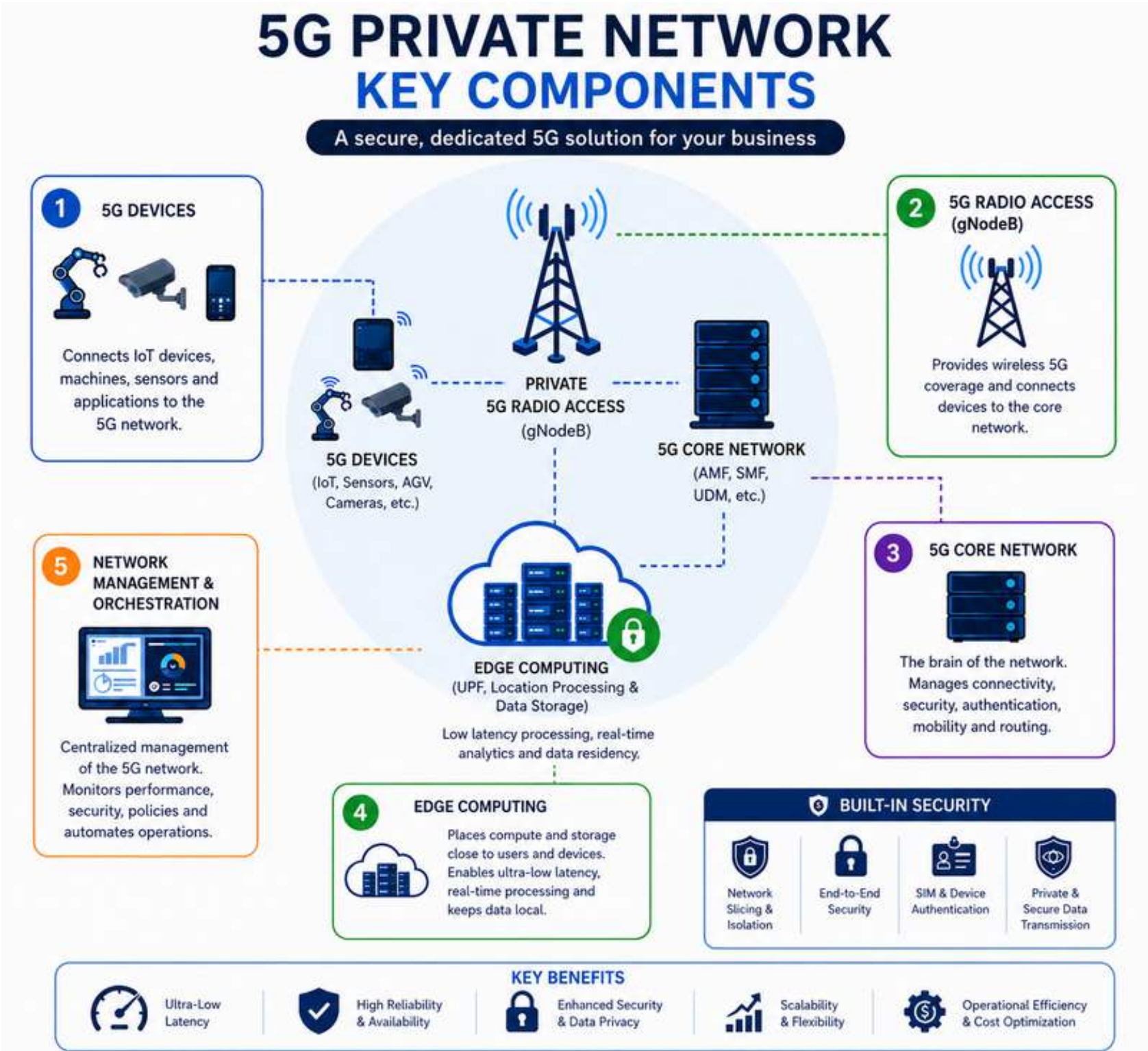


POTENTIAL IMPACT OF 5G PRIVATE NETWORKS

- 01 Operational Continuity**
Uninterrupted operations with reliable connectivity, minimising downtime across critical industrial environments.
- 02 Security**
Sensitive data and operational systems protected, through dedicated, secure network infrastructure.
- 03 Safety & Compliance**
Real-time monitoring and rapid response, improving workplace safety and compliance.
- 04 Operational Efficiency**
Improved productivity outcomes through automating workflows, where assets and systems are connected seamlessly.
- 05 Cost Efficiency**
Lower operational cost from reduced downtime and resource wastage.
- 06 Scalability**
Connectivity backbone that supports evolving business needs, enabling seamless expansion of connected operations.
- 07 Mission Critical Operations**
Operation of critical applications through a reliable communication network, safeguarding assets and personnel.

Breaking down the 5G Private Network

A 5G Private Network brings together devices, radio connectivity, a secure operating platform, edge computing, and centralised management into one integrated system designed exclusively for enterprise needs. Each component plays a critical role: from connecting IoT sensors, smart cameras and machines, to ensuring ultra-low latency through local processing, to safeguarding data with end-to-end security and orchestration.



Together, these elements deliver the reliability, privacy, and flexibility that industries require to accelerate digital transformation and unlock the full potential of Industry 4.0.

Is a 5G Private Network Right for You?

5G Private Networks aren't for every use case. The right decision depends on your digital transformation agenda, automation goals, scale thresholds, and tolerance for integration complexity.

This checklist helps you assess readiness — while highlighting the considerations you'll need to plan for.

READINESS CHECKLIST

☒ Plan to automate critical operations?	☒ Managing manpower shortages?
☒ Latency affecting your operations?	☒ Need enterprise-grade security & local data control?
☒ Need to improve operational efficiency?	☒ Frequently have connection issues?

If you answered YES to some of these questions, a 5G Private Network could be the solution for you.

CONSIDERATIONS

 **Capex vs Opex Costs**

 **Integration Challenges**

 **Skills Gap**

 **ROI Timelines**

 **Regulatory & Security Concerns**

Decision Insight

The success of a 5G Private Network isn't just about connectivity — it's about aligning technology with business outcomes.

We help enterprises bridge that gap with proven deployment frameworks and advisory support, enabling scalable rollout options aligned with their digital roadmaps.



Technology Advantage

Enterprise-grade architecture ensures sovereignty, reliability and secure separation from public networks.

Our 5G Private Network leverages dedicated spectrum bands for industrial use cases to deliver a stable, reliable network with no interference from external users. Once deployed, full control belongs to you — the network, data, and security.

01



RELIABLE & SECURE

Dedicated spectrum bands ensures interference-free connectivity with enterprise-grade security.

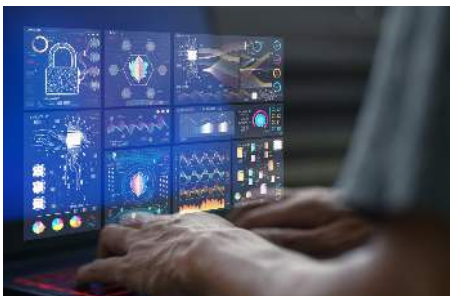
02



ON-DEMAND DESIGN

Flexible 5G Private Network architecture tailored to evolving industrial needs.

03



AUTOMATION & REAL-TIME AI ANALYTICS

Architecture-ready for automation, AI adoption and real-time analytics for long-term scalability.

How We Help Industries



**EMPOWERING INDUSTRIES THROUGH
PURPOSE-BUILT CONNECTIVITY**

MANUFACTURING



Optimising production efficiency

From manufacturing floors to smart cities, our technology enables automation, resilience, and data-driven efficiency — tailored to each industry’s operational realities.

LOGISTICS



Making supply chains more resilient and sustainable

TRANSPORTATION



Advancing safer, smarter & automated port operations

SMART CITIES

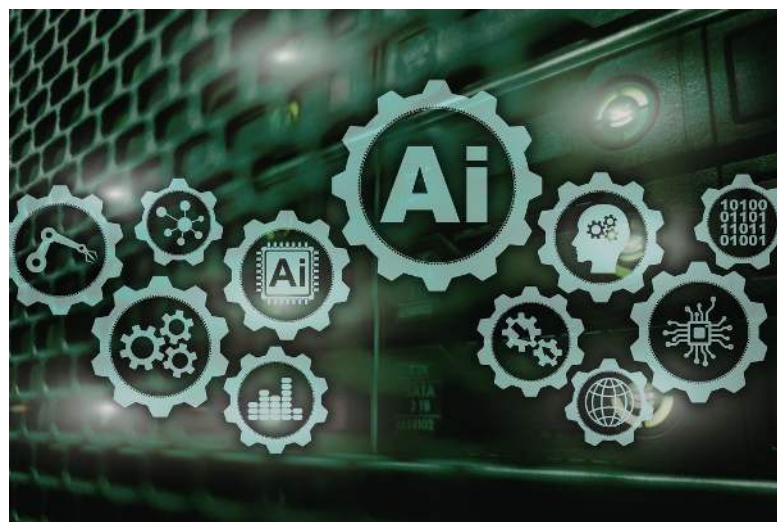


Improving connectivity and making communities safer

Our Services



**FULLY MANAGED, PURPOSE-BUILT
ENTERPRISE 5G NETWORKS**



01

NETWORK DESIGN

Tailored architecture for your site

02

IMPLEMENTATION

Rapid deployment with minimal disruptions to operations

03

SYSTEMS INTEGRATION

End-to-end integration management with your systems & operational environment

04

OPTIMISATION

Performance tuning & SLA management

05

OPERATIONS

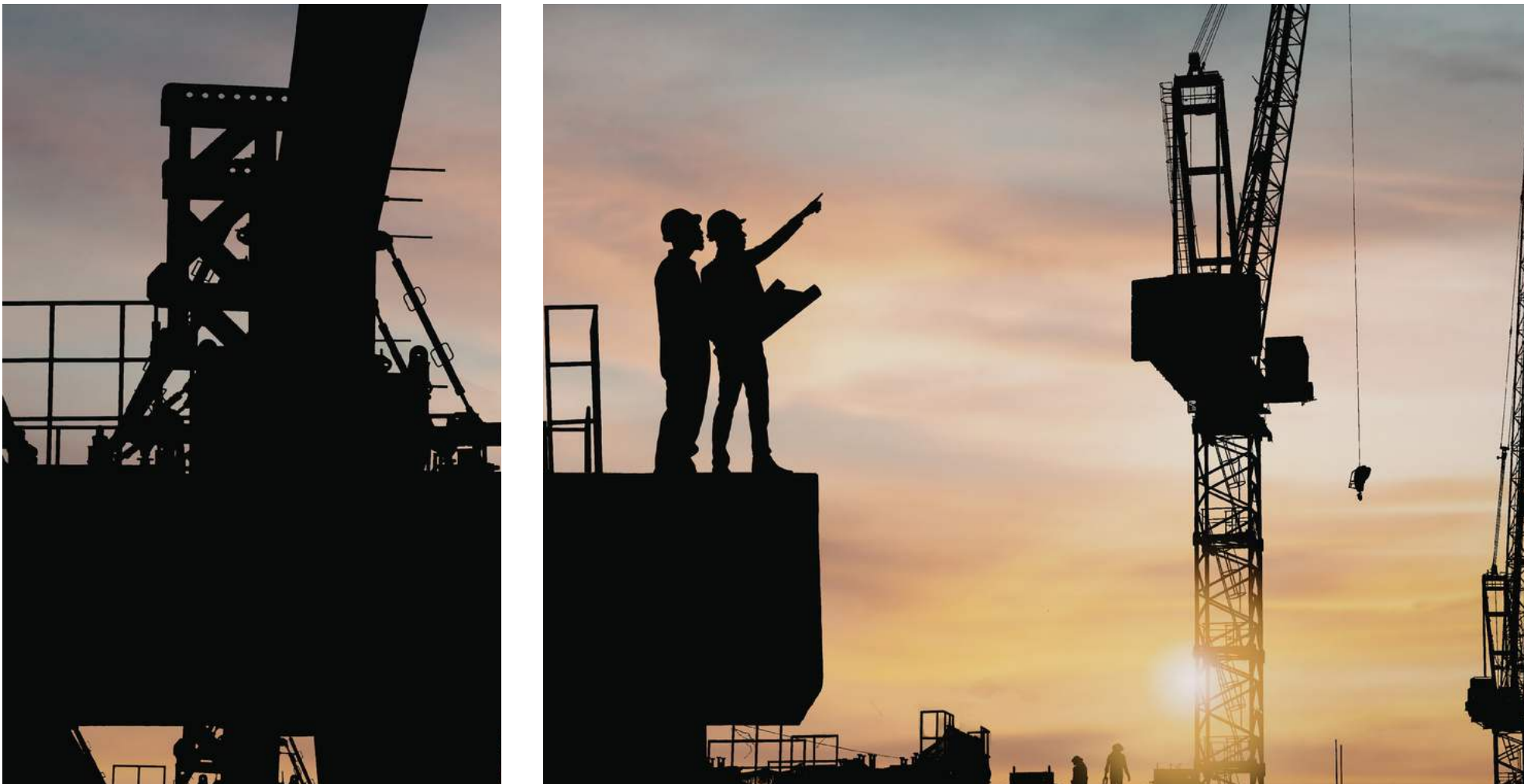
24/7 managed network services

06

MANAGED 5G-AS-A-SERVICE

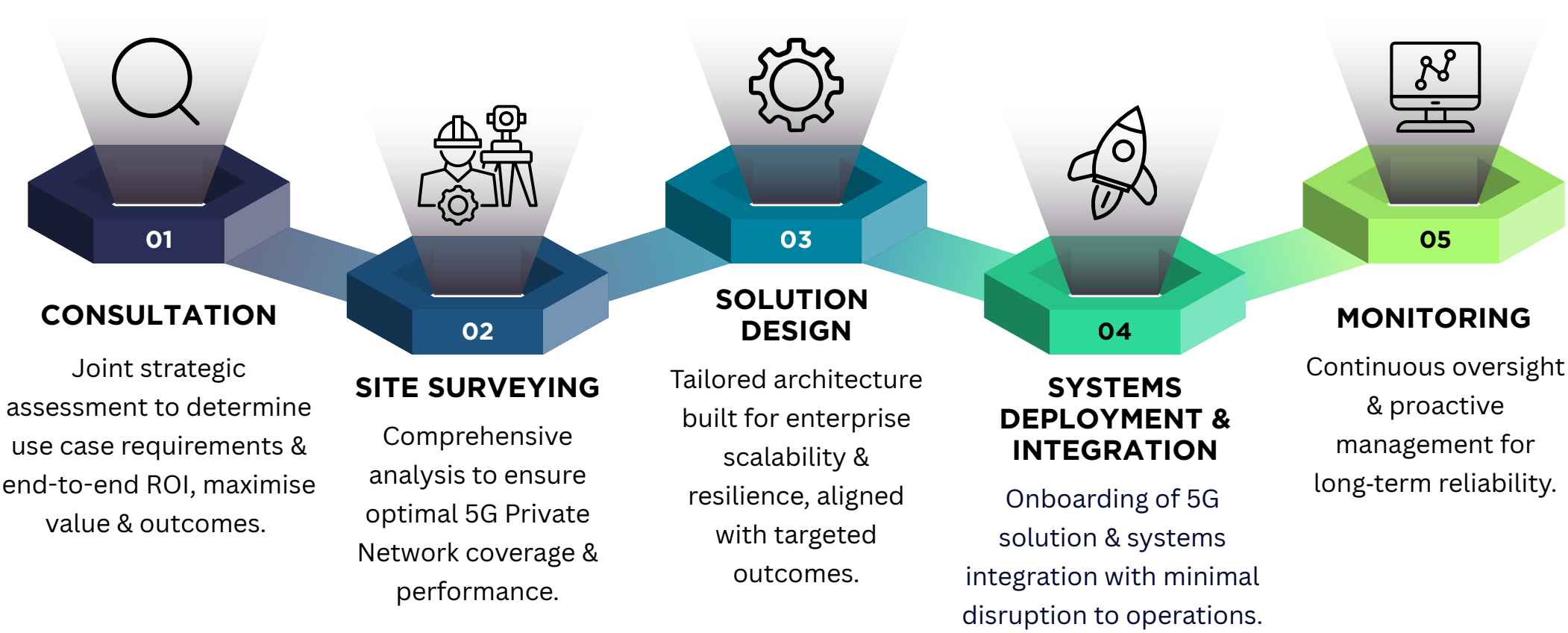
Flexible Opex model





How We Work

Assess, Deploy, Operate - A proven lifecycle delivering secure, enterprise-grade outcomes. From site surveying to SLA-backed operations, we manage every step.



Impact



USE CASES

Real outcomes of 5G Private Network: Faster automation, resilient supply chains, predictive maintenance, secure connectivity for Industry 4.0.

CHINA: 5G-POWERED SMART MANUFACTURING

A renowned automaker's intelligent factory operates on a fully integrated 5G-connected production system, enabling automated assembly, robotics coordination, and real-time diagnostics with minimal human intervention. Human involvement is focused mainly on final assembly and quality inspection.



US: 5G NETWORK ASSEMBLY PLANT

A leading multinational electronics manufacturer's advanced facility, recognised as a World Economic Forum Lighthouse Factory, integrates 5G with AI, digital twins, robotics, and smart automation for washer & dryer production.

SOUTH KOREA: 5G CONNECTED LOGISTICS HUB

A major logistics provider deployed South Korea's first dedicated 5G logistics network (leum-5G) across its Fulfilment Centre. 140 cube robots automate storage and retrieval — completing order-to-pack in under 20 minutes.



BELGIUM: 5G PRIVATE NETWORKS FOR PORTS

A global chemical producer deployed 5G Private Networks at its production site in the Port of Antwerp, using IoT sensors for monitoring of pumps, valves, and pipelines, machine vision applications, and remote AR field inspections for safety critical operations and operational efficiency — meeting ROI targets in just 2 years.

Talk to Us.

Is a 5G Private Network right for you?
Visit our website to explore the
possibilities and contact us to book
an appointment.

EXPLORE

www.enfrasys.com

BOOK AN APPOINTMENT

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