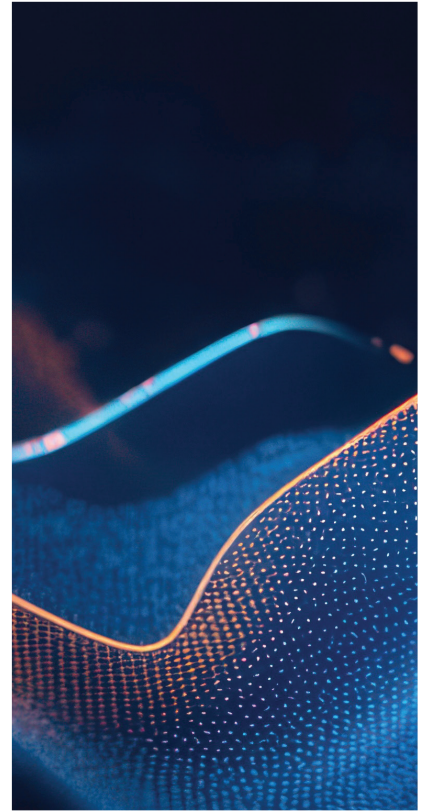
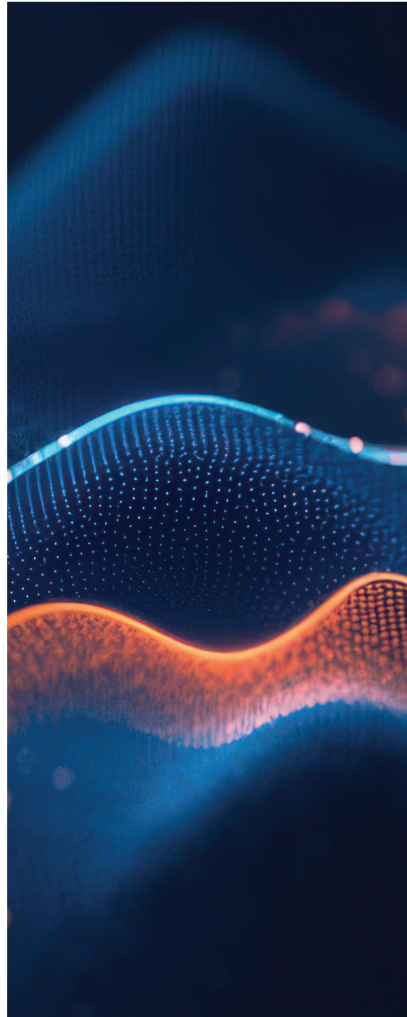


FROST & SULLIVAN
BEST PRACTICES



2026
GLOBAL PRIVATE
5G NETWORK

ENABLING TECHNOLOGY
LEADERSHIP

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Globalstar excels in many of the criteria in the global private 5G network space.

RECOGNITION CRITERIA	
Technology Leverage	Customer Impact
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

Transformation of the Private 5G Network Industry

The global connectivity landscape is shifting as enterprises embrace Industry 4.0, artificial intelligence (AI), and automation. Traditional wireless solutions like Wi-Fi and public 4G — once the standard — now struggle to meet the rigorous demands of mission-critical operations. These legacy systems often suffer from unpredictable latency, signal interference, and limited scalability, creating bottlenecks that stall innovation and the adoption of next-generation technologies.

Private 5G was designed with the enterprise in mind. Private 5G networks can meet the most demanding requirements and enable enterprises to move past the roadblocks that legacy wireless could not. However, the adoption of private 5G networks has been slowed by operational complexity. Most enterprises are not networking experts; they seek the advanced functionality of private 5G, but demand the simplicity of legacy systems. Conventional private 5G deployments rely on multiple independent cells — one per radio access network (RAN) — as well as extensive radiofrequency (RF) planning, and complex handover management, all of which increase costs and deployment risk. As enterprises scale across larger footprints or harsher environments, Frost & Sullivan notes that these challenges compound, preventing initial pilots from evolving into robust systems capable of supporting thousands of devices.

Consequently, the private 5G network industry is pivoting toward software-defined, edge-centric, and spectrum-flexible architectures. This evolution favors solutions that collapse network complexity,

maximize spectral efficiency, and integrate seamlessly within both information technology (IT) and operational technology (OT) environments to deliver deterministic, simplified performance.

Frost & Sullivan recognizes how **XCOM RAN** by Globalstar is positioned squarely within this transformation, redefining how private 5G networks are architected, deployed, and scaled to support AI-driven applications, edge computing, and autonomous systems.

Software-Defined Supercell Architecture Unlocks Deterministic Performance

A central challenge in private 5G deployments is achieving consistent, high-capacity performance without introducing operational complexity. Traditional approaches fragment coverage into multiple independent cells, creating handover boundaries, interference zones, and performance variability. XCOM RAN

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– **Troy M Morley**
Industry Principal

addresses this challenge through its software-defined Supercell architecture, in which multiple geographically separated radio nodes simultaneously transmit data to, or receive data from, user devices at the edge by acting as a single, massive virtual antenna array and present themselves to devices as a single, unified cell—a Supercell. This architectural innovation enables capacity to scale by adding radios rather than spectrum, allowing enterprises to increase throughput while maintaining uniform performance across the coverage area. Devices can remain connected to multiple radios simultaneously, eliminating handovers and reducing interference—an approach that directly addresses the latency and

reliability requirements of mission-critical industrial applications such as autonomous mobile robots, AI-driven quality inspection, and real-time analytics.

XCOM RAN by Globalstar delivers unprecedented performance, increasing capacity by up to 4x compared to legacy small cell solutions. This capability ensures flawless connectivity for automation environments where thousands of devices operate simultaneously. With latency as low as 10 milliseconds and 99.99% reliability, XCOM RAN supports real-time control loops, predictive maintenance, and AI-driven decision-making.

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End-to-End Private 5G Stack Designed for Enterprise Operations

While many private 5G offerings focus narrowly on the radio access network, XCOM RAN has expanded its platform into a fully integrated, end-to-end solution. The recent launch of its next-generation private

5G solution¹ includes the XCOM Radio Series—with the Supercell model outlined previously—and the XCOM Core, XCOM Orchestrator, and XCOM Industrial Router, creating a cohesive private 5G stack spanning RAN, core, management, and device connectivity.

The XCOM Core provides a complete private 5G Standalone core, subscriber management, and

“This spectrum-led differentiation strengthens XCOM RAN’s brand equity as a provider of enterprise-grade private 5G infrastructure. By aligning architectural innovation with exclusive licensed spectrum assets, XCOM RAN positions itself not merely as a technology vendor but as a long-term strategic partner for organizations seeking resilient, scalable wireless foundations for digital transformation.”

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Kubernetes-native deployment, enabling flexible on-premises, cloud, or hybrid architectures. Tight integration with the XCOM Orchestrator allows enterprises to manage radios, devices, performance, alarms, and software upgrades through a single pane of glass, reducing operational friction and lowering the barrier to adoption for IT teams new to private 5G.

By extending the platform to include the XCOM Industrial Router, XCOM RAN addresses a critical gap in industrial device ecosystems. The router enables legacy industrial equipment, sensors, and programmable logic controllers (PLCs) to connect securely to private 5G networks, supporting ultra-low-latency communications and remote monitoring for

Industry 4.0 use cases. This end-to-end approach demonstrates strong commercialization discipline by aligning technology innovation with real-world deployment needs across manufacturing, logistics, ports, energy, and adjacent industrial verticals.

Spectrum Flexibility and Licensed n53 as a Strategic Differentiator

Spectrum availability and reliability remain among the most significant constraints in private wireless deployments. XCOM RAN addresses this challenge through spectrum flexibility, supporting shared spectrum band n48 in the United States and locally licensed band n78 in Europe and Asia while uniquely enabling deployments on Globalstar’s exclusively licensed band n53 in over 13 countries. This capability provides enterprises with access to clean, interference-free spectrum suitable for mission-critical operations.

Band n53 operates in the mid-band range, balancing coverage and capacity while offering deterministic performance characteristics that are difficult to achieve in unlicensed or heavily congested bands. XCOM RAN’s ability to deliver a turnkey private 5G solution—including spectrum, infrastructure, and devices—reduces procurement complexity and improves the overall price/performance equation for industrial customers.

This spectrum-led differentiation strengthens XCOM RAN’s brand equity as a provider of enterprise-grade private 5G infrastructure. By aligning architectural innovation with exclusive licensed spectrum assets,

¹ See <https://investors.globalstar.com/news-releases/news-release-details/xcom-ran-globalstar-launches-next-generation-end-end-private-5g>.

XCOM RAN positions itself not merely as a technology vendor but as a long-term strategic partner for organizations seeking resilient, scalable wireless foundations for digital transformation.

Conclusion

By reimagining private 5G architecture through its software-defined Supercell design, delivering a fully integrated end-to-end platform, and uniquely leveraging licensed band n53 spectrum, XCOM RAN by Globalstar addresses the most pressing performance, scalability, and operational challenges facing industrial wireless deployments today. The company's approach enables deterministic, low-latency connectivity that supports the growing demands of physical AI and Industry 4.0 applications while simplifying deployment and management for enterprises.

With its strong overall performance, Globalstar earns the 2026 Frost & Sullivan Global Enabling Technology Leadership Recognition in the global private 5G network.

What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Recognition identifies the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

Best Practices Recognition Analysis

For the Enabling Technology Leadership Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Customer Impact

Price/Performance Value: Products or services offer the best ROI and superior value compared to similar market offerings

Customer Purchase Experience: Purchase experience with minimal friction and high transparency assures customers that they are buying the optimal solution to address both their needs and constraints

Customer Ownership Excellence: Products and solutions evolve continuously in sync with the customers' own growth journeys, engendering pride of ownership and enhanced customer experience

Customer Service Experience: Customer service is readily accessible and stress-free, and delivered with high quality, high availability, and fast response time

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty, which is regularly measured and confirmed through a high Net Promoter Score®

Benefits & Impact

Receiving a Best Practices Recognition allows recipients to take a step back and reflect on their achievements and celebrate them. Many might be at the very beginning of that journey, and for some, this comes as validation of years of hard work. We take pride in helping these trailblazers promote their recognition and showcase how Best Practices Recognition recipients are changing the world.

VALUE IMPACT			
STEP		WHAT	WHY
1	Opportunity Universe	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	Transformational Model	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	Ecosystem	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	Growth Generator	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	Growth Opportunities	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	Frost Radar	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	Best Practices	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	Companies to Action	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

*Board of Directors, Investors, Customers, Employees, Partners

This recognition results from many individuals making daily critical decisions to support your organization and contribute to its future. Frost & Sullivan enthusiastically acknowledges and celebrates their contributions.

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at <http://www.frost.com>.

The Growth Pipeline Generator™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fueled by the Innovation Generator™.

[Learn more.](#)

Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- **Innovation Culture:** Optimized Customer Experience
- **ROI & Margin:** Implementation Excellence
- **Transformational Growth:** Industry Leadership



The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- **Megatrend (MT)**
- **Business Model (BM)**
- **Technology (TE)**
- **Industries (IN)**
- **Customer (CU)**
- **Geographies (GE)**

