

Fiber supply shouldn't keep you up at night

Why strategic supply chain planning is becoming
the competitive advantage in fiber infrastructure

Whitepaper



We build
connections

Table of contents

01 Executive summary	03
02 Fiber has become a strategic resource	04
03 Why traditional procurement no longer works	05
04 Supply resilience begins long before construction	07
05 Building resilience through partnership	08
06 Why regional manufacturing matters	09
07 Managing risk in a concentrated market	10
08 Why organizations choose Netceed	11
09 Conclusion	12

01 Executive Summary

For years, fiber optic cable was treated as a commodity.

Today, it has become one of the most strategic resources in the digital infrastructure industry.

The rapid expansion of AI, hyperscale data centers, broadband initiatives, utility modernization and next-generation connectivity is driving unprecedented demand for fiber worldwide. At the same time, manufacturing capacity remains limited, and supply is widely expected to stay constrained at least through 2027, with normalization not anticipated before 2028. This is a structural shift, not a short-term disruption - and it is placing sustained pressure on global supply chains.

The result is a market where project success is no longer determined solely by engineering expertise or construction capabilities but by the ability to secure supply.

At Netceed, we work with network operators, utilities, contractors and infrastructure providers across global markets. While every project is unique, one pattern has become increasingly clear:

The organizations that engage their supply chain partner early consistently experience fewer delays, greater cost stability and more predictable project delivery.

This paper explores why the fiber market has fundamentally changed, why traditional procurement models are no longer sufficient, and how strategic supply chain partnerships are becoming one of the most important competitive advantages in network infrastructure.

2020
Stable supply



2023
Demand surge



2025
AI acceleration



2027
Supply constraints continue



2028
Expected normalisation

02 Fiber has become a strategic resource

The fiber market has entered a new reality.

Demand is no longer driven by broadband deployments alone. Today, multiple industries compete simultaneously for the same manufacturing capacity.

Artificial Intelligence requires massive hyperscale data centers. Cloud providers continue expanding globally. Governments accelerate nationwide fiber programs. Utilities modernize critical infrastructure, 5G and edge computing continue to increase fiber consumption. The scale of this demand is striking: CRU reports that the major hyperscalers - Microsoft, Amazon, Google and Meta - are collectively investing roughly US\$370 billion a year in AI infrastructure, with Meta alone committing to a US\$600 billion multi-year initiative, and links this investment directly to rising pressure on physical fiber networks, “Fiber Connect 2026: AI, Broadband and the Next Phase of Optical Network Expansion,” 29 May 2026).

These developments have fundamentally shifted the balance between supply and demand.

Fiber is no longer simply purchased.

It must be strategically secured - availability is increasingly allocation-led rather than driven by spot purchasing.

One can see this transformation across every region. Conversations with customers have shifted from product selection to supply assurance. Increasingly, organizations are asking not only what they need - but whether it will be available when they need it.

That represents a fundamental change in the market.

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Cost volatility in fiber optics cannot be addressed through short-term actions alone - it requires a disciplined, partnership-driven approach across the value chain.

James DeCoe
Group Chief Product & Procurement Officer, Netceed

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This reflects what Netceed experiences every day across international infrastructure projects: supply resilience is no longer created through purchasing power alone. It is built through planning, visibility and trusted partnerships.

03 Why traditional procurement no longer works

For decades, procurement followed a predictable and reliable process. Network projects were designed, budgets approved, contracts awarded. Only then did purchasing begin. In a stable market with readily available materials, this sequential approach worked well.

Traditional procurement

Project Planning



Engineering & Design



Budget & Contract Approval



Procurement



Manufacturing



Construction

Problems

- Long lead times
- Price volatility
- Limited availability
- Reactive purchasing

Strategic procurement

Project Planning



Engineering & Design



Early Supply Chain Planning



Early Supplier Engagement & Procurement



Capacity Allocation & Manufacturing



Construction

Benefits:

- Early allocation
- Better forecasting
- Predictable pricing
- Lower risk

Today's fiber market is fundamentally different.

By the time a project reaches the procurement stage, manufacturing capacity may already be fully allocated, lead times may have increased significantly, and pricing may have shifted. In some cases, the required materials are simply no longer available within the project's delivery window. As a result, procurement teams are often forced into reactive decisions, balancing availability, cost, and project timelines rather than executing a carefully planned sourcing strategy.

The consequences are familiar across the industry: delayed deployments, increasing project costs, and growing uncertainty for network operators, contractors, and infrastructure providers alike.

Leading organizations have recognized that the traditional procurement model is no longer sufficient. Rather than treating purchasing as the final step before construction, they are integrating supply chain planning much earlier in the project lifecycle. Procurement, engineering, logistics, and suppliers work together from the outset, creating greater visibility into future demand and allowing manufacturing capacity to be secured well before construction begins.

At Netceed, we have seen firsthand how this shift changes project outcomes. By engaging with customers during the planning phase - often months before materials are required - we help align demand forecasts with supplier capacity, coordinate logistics, and reduce the risks associated with volatile market conditions. The result is greater planning certainty, improved cost predictability, and a significantly more resilient supply chain.

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Multi-year allocation agreements, early procurement strategies, and flexible pricing mechanisms are critical levers to stabilize supply, improve predictability and reduce exposure to market swings.”

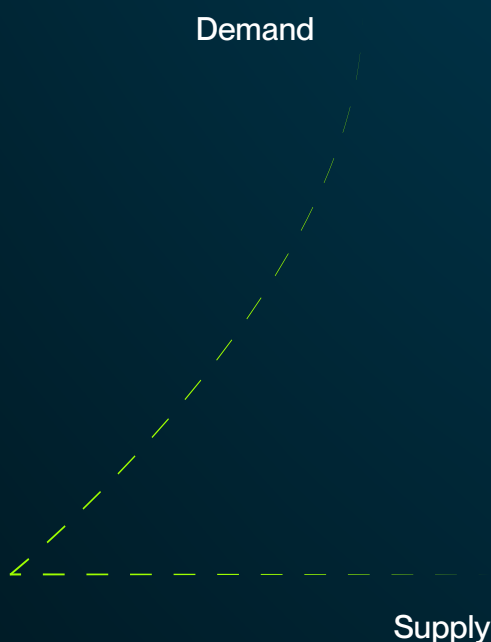
James DeCoe

Group Chief Product & Procurement Officer, Netceed

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Early engagement creates opportunities that simply do not exist once procurement becomes reactive.

04 Supply resilience begins long before construction



Reliable projects begin long before the first cable arrives on site.

In our experience, **supply resilience depends on five critical planning decisions.**

These are not simply procurement activities.

They are strategic planning decisions.

At Netceed, these conversations begin months before material is ordered, allowing customers to secure capacity rather than compete for it later.

1. Demand Visibility

Manufacturers cannot reserve capacity for demand they cannot see. Accurate forecasting enables production planning long before material is required.

2. Project Timelines

Construction schedules should drive manufacturing - not the other way around. Sharing deployment plans early allows suppliers to align production with project milestones.

3. Technical Alignment

Confirming cable specifications, fiber counts and technical requirements early eliminates unnecessary redesigns and production delays.

4. Qualification Planning

Standards, certifications and customer approvals should never become last-minute obstacles.

5. Regional Risk Assessment

Supply chains have become increasingly global. Understanding geopolitical risks, logistics constraints and regional market conditions enables more resilient sourcing strategies.

05 Building resilience through partnership

The companies navigating today's market most successfully have one thing in common: They no longer treat suppliers as vendors - they treat them as strategic partners.

	Transactional Procurement	Strategic Partnership
Primary objective	Lowest purchase price	Value and continuity
Planning horizon	Short-term	Long-term
Supplier relationship	Vendor	Strategic partner
Demand visibility	Limited	Shared forecasts
Manufacturing capacity	Purchased when needed	Secured in advance
Project outcome	Reactive	Predictable

At Netceed, we have invested for years in long-term relationships with leading global manufacturers because resilient supply chains cannot be built overnight. They are built through trust, transparency and shared planning.

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Strategic partnerships across the industry can significantly improve resilience. Joint planning, demand transparency and long-term commitments create greater predictability for manufacturers and customers alike.

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James DeCoe
Group Chief Product & Procurement Officer, Netceed

For customers, the benefit is simple:

More predictable
projects

Less
uncertainty

Greater
confidence

06 Why regional manufacturing matters

Recent disruptions across global supply chains have renewed the discussion around regional manufacturing - and for good reason. Expanding production capacity in Europe can strengthen supply resilience by shortening transportation routes, improving responsiveness, and enabling closer collaboration between manufacturers, distributors, and infrastructure providers. For critical infrastructure projects, these advantages can translate into shorter lead times, greater planning certainty, and increased supply security.

However, regional manufacturing alone is not enough to meet the growing global demand for fiber. The market will continue to rely on an international network of manufacturers, making supply chain resilience less about geography and more about diversification, flexibility, and long-term planning. The organizations that navigate today's market most successfully combine global sourcing capabilities with strong regional execution. They leverage international supplier networks to secure capacity while relying on local expertise to ensure materials arrive where and when they are needed.

At Netceed, this balance is at the core of our supply chain strategy. Through long-standing relationships with leading global manufacturers, combined with regional inventory, local logistics capabilities, and market-specific expertise, we help customers build resilient supply chains that are both globally connected and locally responsive.



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Localized production enhances supply security, shortens lead times, and increases responsiveness. Particularly for time-sensitive, infrastructure-critical deployments.

James DeCoe
Group Chief Product & Procurement Officer, Netceed

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07 Managing risk in a concentrated market

Global fiber manufacturing remains highly concentrated, with upstream preform capacity - the raw glass input from which optical fiber is drawn - acting as the core bottleneck. As broadband expansion, national infrastructure programs and accelerating AI and data-center buildouts compete for the same limited output, that concentration magnifies exposure to disruption.

These are the strategies increasingly separating resilient infrastructure programs from vulnerable ones.



Reducing
supply risk.
Delivering
confidence.

At Netceed, managing this complexity is part of our role as a strategic supply chain partner. Rather than reacting to market volatility, we help customers anticipate it.

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A highly concentrated supply base increases exposure to geopolitical disruptions, capacity constraints and price volatility, all of which can delay deployments and inflate costs.

James DeCoe
Group Chief Product & Procurement Officer, Netceed

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08 Why organizations choose Netceed

Supply chain resilience is not created through products alone. It requires:



At Netceed, we combine all four.

We work with customers long before procurement begins, helping them understand demand, align project schedules, secure manufacturing capacity and reduce supply risk.

Our customers benefit from:

- A global supplier ecosystem with long-standing manufacturer relationships
 - Local experts who understand regional markets and project requirements
 - Early demand forecasting and capacity planning
 - Integrated sourcing, warehousing and logistics
 - Technical expertise across the complete fiber infrastructure portfolio
 - End-to-end supply chain management from planning through delivery
 - Global purchasing scale and aggregated demand that strengthen our position with manufacturers
- More importantly, we help customers shift from reactive purchasing to strategic supply chain management. Because the earlier planning begins, the more resilient projects become.

Key Takeaways

The fiber market has fundamentally changed.

Success is no longer determined only by engineering excellence.

Increasingly, it depends on supply chain resilience.

The organizations leading tomorrow's infrastructure projects are already adapting today.

They are:

- Treat fiber as a strategic resource.
- Start procurement during planning - not after project award.
- Build long-term partnerships instead of transactional supplier relationships.
- Increase visibility across the entire supply chain.
- Secure manufacturing capacity before market conditions change.

At Netceed, this philosophy shapes every customer engagement.

Because we believe reliable infrastructure starts long before construction begins.

It starts with securing supply.

The companies that will lead the next decade of digital infrastructure won't necessarily be those that can build the fastest. They will be the ones that can secure supply first. At Netceed, helping customers achieve exactly that is what we do every day. Through global scale, trusted supplier relationships, technical expertise and integrated supply chain solutions, we help organizations reduce uncertainty, improve planning and keep critical infrastructure projects moving.

09 Conclusion



Start the conversation early. [Talk to Netceed](#) about building a fiber supply and planning strategy for your upcoming builds - and secure capacity before the market sets your timeline for you.

[Because fiber supply shouldn't keep you up at night.](#)





We build connections

Get in touch

Reach out to your dedicated procurement contact for more information.



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