



Market Assessment

Telecom Infrastructure Services

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Contents

- Market Summary
- Market Review
- Near-Term Market Drivers
- Long-Term Market Drivers



Current Analysis
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Telecom Infrastructure Services

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**Telecom
 Infrastructure
 Services Solutions
 Assessments**

Market Definition

The telecom infrastructure services market includes network-related service solutions delivered by vendors and services firms to telecom network operators. The market can be segmented in various ways: by technology (fixed versus wireless), supplier (vendor versus integrator), or service type. Many are “proactive services,” that is, those services delivered in the earlier stages for the network lifecycle, prior to commissioning (e.g., planning, design, installation, etc.). Others are more “reactive services,” including services delivered to existing networks (e.g., optimization, support, operations, and maintenance). While referring to these differences and similarities in technologies, suppliers, and service types, we find the following market segmentation to be the most useful, because it divides fundamental process types into categories that competitors can use to analyze their relative market positions from a basis of organizational resources, competency, and investment.

Market Segment	Services
Professional Services	<ul style="list-style-type: none"> - Network consulting (including planning and design) - Systems integration (including network migration, or “transformation”) - Network optimization
Technical Services	<ul style="list-style-type: none"> - Deployment (including installation and commissioning) - Maintenance (including repair and replacement) - Support (including help desk and troubleshooting) - Training and education
Managed Services	<ul style="list-style-type: none"> - Network outsourcing - Hosted and managed services and applications

The professional services segment includes network design and consulting, systems integration and migration, and network optimization services. Network equipment suppliers are finding their skills in greater demand among service providers that need the suppliers to step in on a consultative basis to help them get the best performance out of their network investments.

The technical services segment comprises the deployment, maintenance, and technical support activities of network vendors. This includes installation and commissioning, repair and replacement services, software upgrades, troubleshooting and technical support, and training and education services. As with the managed services and professional services segments, multi-vendor competencies are being developed by vendors in order to compete effectively for a greater share of customer spend.

The managed services segment consists of network outsourcing as well as hosted and managed application services. Increasingly, carriers are looking to the potential outsourcing benefits of scale and time-to-market in order to address market opportunities flexibly and efficiently while minimizing costs (both CapEx and OpEx) and risk.



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Mega-Mergers Build Scale

With the merger of Alcatel-Lucent, and the joint venture between Nokia and Siemens (to form Nokia Siemens Networks), four of the largest vendor services groups are collapsing into two mega-entities. These combinations will compare favorably with market leader Ericsson in terms of their scale of resources and market share. Unlike in product markets, doubling up on resources in services is good, because in people-based services, headcount drives revenues. Increasing scale improves competitiveness, if deployed efficiently.

Vendors Prioritize Services

In most major telecom vendors, the services business is no longer a backwater compared to product groups—it is positioned on an equal footing. Following the cue of Ericsson, Lucent, and Nokia, Nortel restructured its services business in 2006, and Huawei plans to develop its services capabilities to become more competitive in the future. Cisco’s services groups have received much more visibility recently, while mid-size vendors like Sonus Networks are also developing their services capabilities.

Evidence of Growth is Consistent

Published forecasts are difficult to find, but six of the largest vendors combined achieved approximately \$20 billion in services revenues in 2005, which we estimate represents 20% to 40% of the total market. In terms of growth, in their most recently reported fiscal years, Ericsson reported 29% growth in services revenues, with Lucent demonstrating 10%. Siemens, unofficially, achieved similar performance (8%). Market-wide, growth is higher in the professional and managed services segments, with lower growth in the technical services segment.

Outsourcing Finds Increasing Acceptance

Some telco organizations may never outsource network functions, such as network operations and service delivery. But there is clear evidence that managed services are beginning to penetrate fixed carrier markets, while they are almost flourishing in the mobile space. In the first three quarters of 2006, telecom network vendors announced 54 managed services contracts, and five of the leading vendors currently manage networks or host applications for over 400 operators worldwide.

Vendors Struggle to Differentiate Offerings

Just as it is more difficult differentiating an accountant in the marketplace than an accounting software package, so too is it tricky developing a unique position in telecom infrastructure services. Wherever the end product is customized for the particular needs of a client, any supplier can claim to be able to provide it. The result is that vendors must rely on the most traditional and least innovative ways of achieving competitive advantage: through legacy relationships, regional resources, and strategic partnerships.

IT Services Companies are Firmly Entrenched in “Co-opetition”

Our coverage of this market is focused mainly on network equipment vendors and their forays into value-added services. But system integrators and consulting firms are playing

Market**Telecom
Infrastructure
Services**

both against and alongside them, delivering a variety of network-related services to telecom operators. IT services firms are especially present in providing services for OSS integration, and they are often partnered formally or informally with one of the large equipment manufacturers.

■ Near-Term Market Drivers**Mega-Mergers Open a Window of Opportunity**

The Alcatel-Lucent and Nokia-Siemens combinations open a window of opportunity for competitors to seize the moment and strike while the competition is otherwise engaged in near-term integration distractions. While the duration is brief, the opportunity is real, as the new organizations' sales effectiveness will be impaired while potential customers wait to see how the dust settles. Competitors will seek to take advantage, potentially impacting market share.

Telecom Competition is Only Increasing

In many regional markets around the world, service provider competition is increasing every year. This drives the focus of carriers away from networks and technology and toward services and customers. As they spend increasing resources on marketing and customer service, operators are relying more and more on suppliers to be their technology advisors, implementers, and/or operators.

Engaging Service Partners Minimizes Risks for Operators

After being burned in the telecom downturn earlier this decade, carriers now increasingly expect suppliers to assume part of the risk in deploying new network architecture. This occurs in managed services contracts where vendors provide assets and staff and there are service level agreements and key performance indicators to meet. It also occurs in technical services such as spare parts management, where inventory management risks can be transferred to a supplier.

Multivendor Networks Require New Expertise

Carriers want new equipment to be standards-based, to create viable alternatives for sourcing components among a competitive field of vendors, and they are creating secondary and tertiary supplier classes in order to keep primary suppliers honest. Having a variety of manufacturers represented in a single system requires new competencies for provisioning, optimization, and maintenance. While carriers have been pruning their operations staffs to cut costs, vendors have been building their knowledge of each other's products.

Vendor-Carrier Relationships are Changing

From the carrier side, there is a growing desire to reduce the number of vendor relationships they need to maintain, despite their contradictory desire to source from multiple suppliers. From the vendor side, relationship management via services can help maintain market share within individual carriers whether they can supply the needed network components from their own product portfolio or not.

**Telecom
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Services****OpEx Reduction is Pandemic**

In the drive to achieve or increase profitability, carriers have reduced staff dedicated to network design, implementation, and management. Carriers once invested huge sums in training operations staff on vendor-specific switching platforms, a model that served its purpose over periods of a decade or two. Smaller staffs today mean limited in-house expertise, driving demand for trusted partner services. The drive to reduce costs can also lead to outsourcing network operations to vendors.

Services are About Managing Complexity

As the long-term trends of fixed-mobile convergence and IP network migration continue, services suppliers will take on a greater role in managing network complexity. Network migration is generally evolutionary, with operators squeezing every last drop of value out of legacy investments. New networks and elements must be integrated with the old, often creating complex problems to solve. As time goes on, vendors will become experts in complex project management as much as they are in technology product development.

New Service Providers Will Outsource Service Delivery

While a key industry focus among telcos is the rollout of content services in order to compete in the entertainment industry, the corollary is likely to occur with content industry players launching communications services. A satellite TV or radio company, or major newspaper publisher, however, is not going to spend resources on developing expertise in telecom network building and operation. An example is Disney Mobile, operating as an MVNO.

Margins Issues Will Cease as Vendors Take Control

In the near term, some vendors will temper their services business strategies due to fears of margin loss. Transitioning a manufacturing company to a people-based business requires the ability to exact much stronger control over what are smaller profit opportunities. This has been achieved in the IT world, where companies such as IBM and HP have transformed their businesses into value-added service solution providers. Telecom vendors will eventually follow a similar path.

Telecommunication Infrastructure Services

A solutions-based analysis of the vendor services landscape

Service Features:

- ▶ Solution Assessments of Service Portfolios
- ▶ Industry Intelligence Reports
- ▶ Market Assessments
- ▶ Advisory Reports

Professional and managed services are now a critical business opportunity for Telecom Infrastructure vendors. Mobile and fixed service provider networks across the globe are facing inevitable technology convergence, generating demand for telecom infrastructure expertise stretching across multiple, complex technologies and processes. Telecom vendors are stepping in to enable these network transformation projects. At the same time, these vendors are struggling to differentiate their service offerings in the marketplace, while coping with challenges and opportunities from "co-opetition" with the IT services industry.

Current Analysis provides a structured approach to better understanding and responding to your competition. By providing real-time business intelligence on competitor strengths, weaknesses, services, and trends, we enable Competitive Response™ - the process of formulating both strategic and tactical plans for responding to the competitions every move.

SERVICE DESCRIPTION

Delivered via our web-based platform CurrentCOMPETE™, Current Analysis' Telecom Infrastructure Services solution tracks and analyzes events, technologies, and companies shaping the value-added vendor services market in the telecom sector. Comprehensive coverage includes vendor Solution Assessments and analysis of key events in the marketplace, covering announcements of new services and strategies, mergers and partnerships, as well as a monthly round-up of new vendor contracts.

Benefits

- Understand competitors' value-added service portfolios, including scale, strengths, weaknesses, market positioning, and market traction
- Leverage analysis of breaking news in the services market, including new service offerings, strategic partnerships, and mergers and acquisitions
- Track new services contracts awarded by operator customers, with assessments of the competitive impact of each new deal
- Learn about new strategies and business models that work, or don't work, in the context of an infrastructure vendor, through in-depth advisory reports that examine issues that affect all competitors

KNOW YOUR COMPETITORS, THEIR STRATEGIES, AND TACTICS FOR RESPONDING EFFECTIVELY

"Current Analysis' info is more precise than the other research services. It is tuned to the faster pace of sales."

- National Account Manager

Tier one service provider

COMPANIES COVERED (PARTIAL LIST)

» Alcatel	» Ericsson	» Motorola
» Amdocs	» Fujitsu	» Nokia
» Atos Origin	» Hewlett-Packard	» Nortel
» CapGemini	» Huawei	» Relacom
» Cisco	» IBM	» Siemens
» Convergys	» LogicaCMG	» Telent
» EDS	» Lucent	» Telindus

MARKET SEGMENTS COVERED

Market Segment	Service Opportunities
Professional Services	Network consulting Systems integration Network optimization
Managed Services	Network outsourcing Managed network services Hosted application
Technical Services	Deployment Maintenance Support Training

To learn more about Current Analysis Solution Assessments, please contact:

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STAY INFORMED WITH ANALYSIS OF MAJOR INDUSTRY ISSUES

- » The incessant drive among network service providers to reduce operating expenses
- » Growing demand by operators for multi-vendor expertise from equipment suppliers
- » Increased pressure on vendors to assume greater risk in new technology deployments
- » The debate on outsourcing, including the changing definition of what constitutes core functions and competencies



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Our business model and solutions are built on the foundation of solid, quality intelligence and data, making Current Analysis the leader for competitive intelligence demands. We serve more than 40,000 users at over 250 enterprise clients. Our client base represents the preeminent firms in the telecommunications, information technology and consumer electronics industries.