Outsourcing Network Operations
Maximizing the Potential
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EXECUTIVE SUMMARY

Telecommunications operators looking for ways to cut costs and concentrate on their core businesses have been giving more thought to the outsourcing of their network and field services operations. Many operators are already outsourcing some or all of their field services activities, according to a recent Booz & Company study, and more and more are taking the same approach to their network operations. By and large, the practice has lived up to their expectations, encouraging operators to consider further outsourcing. The single biggest driving force behind this trend is the desire to reduce operating expenses, and as operators strive to cut costs further, they will begin to outsource more activities long thought to be at the core of their network operations. The desire to further differentiate their network services through increased efficiency is starting to be seen not as a barrier to outsourcing but rather as an additional impetus.

Operators continue to prefer to outsource their network and field operations to the large telecom equipment manufacturers that currently dominate the field. This may change, as smaller vendors with specialized expertise enter the market in increasing numbers, allaying operators’ fears of too little competition. In response, the large vendors—already under pressure from the decline of their traditional business—are likely to offer improved service levels and innovations in their network service processes as a way to maintain their market positions, further encouraging the trend toward outsourcing.

Our study revealed a number of key lessons that should be taken into account by operators and vendors alike. In general, operators must resolve internal issues before outsourcing, time their outsourcing arrangements carefully, and develop workable key performance indicators (KPIs) early in the process. Vendors need to avoid over-promising on what they can deliver, and work to develop innovative outsourcing offerings to differentiate themselves from rivals and meet the needs of operators with very distinct processes and cultures.
Throughout the global telecom industry, operators continue to look for ways to manage costs and improve their operational efficiency. Even as operators’ revenues have held relatively steady through the recent downturn, the long-term revenue outlook is less secure. And operators must keep looking for ways to free up capital for strategic investments in new technologies or to make acquisitions as they drive to build scope and scale.

To that end, operators large and small are increasingly turning to outsourcing both network and field services operations—a trend that we expect will only gain momentum in the future. In hopes of learning more about how and why telecom operators have jumped on the outsourcing bandwagon, we recently completed a detailed study of telecom network and field services outsourcing, in which we surveyed telecom executives about their outsourcing strategies, motivations and experiences, lessons learned, and needs going forward.

The main drivers behind this outsourcing trend are clear, and they do not differ greatly from why most companies outsource—cost savings and the desire to concentrate on core competencies. Because the trend is relatively new for some operators, however, it is important to understand not just why it is on the upswing, but also what specifically is being outsourced and how best to approach the task. In designing our survey, we hoped to gain answers to six specific questions about the process:

- What is driving telecom operators to outsource their network operations and field services?
- In what functional areas are operators concentrating their outsourcing efforts?
- Which operators, in which geographic regions, are most likely to outsource these activities?
- How are operators approaching the process of vendor selection?
- How satisfied are telecom operators with their efforts to outsource these services?
- Where is the market for outsourcing field services and network operations heading in the next few years?

*Telecom operators are increasingly turning to outsourcing both network and field services operations—a trend that we expect will only gain momentum in the future.*
The reasons telecom operators gave for outsourcing their network and field operations varied (see Exhibit 1). Yet more than 90 percent of respondents said their primary goal was to reduce operating expenses (OPEX). Only in North Africa were operators not driven by OPEX reduction; instead, they were motivated by the desire to “remove the headache” of managing large workforces over vast geographies. Indeed, many respondents cited better cost control—the ability to manage those large workforces more flexibly as demand changes—as a significant benefit of outsourcing. Meanwhile, reducing capital expenses was rarely cited.

Not one of those we surveyed suggested that outsourcing provided a competitive differentiator; it continues to be seen exclusively as a means of gaining efficiency. This finding is in line with outsourcing providers’ goals of developing solutions that offer process improvements to operators as a way to differentiate themselves.

**Exhibit 1**

*Key Outsourcing Drivers*

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Percentage of Respondents Citing Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEX reduction</td>
<td>90%</td>
</tr>
<tr>
<td>Increased head-count control</td>
<td>20%</td>
</tr>
<tr>
<td>Increased ability to adopt new technology</td>
<td>20%</td>
</tr>
<tr>
<td>Increased flexibility</td>
<td>15%</td>
</tr>
<tr>
<td>Head-count reduction</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>CAPEX reduction</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Enabling establishment of clear processes</td>
<td>&lt;10%</td>
</tr>
</tbody>
</table>

*Source: Booz & Company analysis*
The outsourcing of network services and field operations is a significant undertaking. We found that operators entering into such deals typically expect to reduce OPEX by 20 to 30 percent; much less than that, and outsourcing simply may not be worth the effort. There are exceptions, however: Fixed-line operators, for instance, which typically spend a great deal on network and field operations, are willing to accept savings of 10 to 20 percent. For some respondents, particularly complex outsourcing arrangements may be worthwhile even if they bring savings of less than 20 percent. Yet others pointed out that OPEX savings in the range of 10 percent can be gained through in-house efficiency efforts that don’t require outsourcing at all.

Overall, operators are quite happy with the results of their outsourcing efforts: Two-thirds of respondents said they had realized their OPEX savings goals for the most part—no matter what their initial goals were (see Exhibit 2). Indeed, all of those who reported a savings goal of more than 30 percent reported meeting that goal, at least in part. Of course, in some cases, those initial goals have been contractually stipulated with the provider.

We expect that operators will turn to network services outsourcing in the future for reasons other than OPEX savings. The basic network services offered by vendors are becoming commoditized, and we have already seen efforts by vendors to differentiate themselves through higher service-level guarantees and process innovation. Those improved services and enhanced processes, we believe, will ultimately encourage operators to look beyond cost reduction as a reason to outsource.

Exhibit 2
Savings Goals and Savings Realized

<table>
<thead>
<tr>
<th>Level of OPEX savings expected:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%-20%</td>
</tr>
</tbody>
</table>

OPEX SAVINGS ACHIEVED (RESPONSES BY SAVINGS LEVELS EXPECTED)

Source: Booz & Company analysis
For years, telecom operators have been outsourcing a variety of network functions, including the designing and building of new network technologies. Yet as operators complete much of the work needed to upgrade to faster xDSL and 3G technologies, and business cases for FTTx (last-mile fiber connections) remain unclear, operator attention has turned again to outsourcing the ongoing “run” operations of their traditional businesses (see Exhibit 3). For the same reason, outsourcing providers are also concentrating more of their efforts on developing operations and maintenance services beyond core equipment provision.

Virtually every telecom operator we interviewed either has considered outsourcing the three primary areas of field services operations—site operations, maintenance, and administration—or has already outsourced them (see Exhibit 4).

**Exhibit 3**
Network Operations Functional Breakdown

**Exhibit 4**
Willingness to Outsource, by Function

**WILLINGNESS TO OUTSOURCE (% OF RESPONSES BY FUNCTION)**

<table>
<thead>
<tr>
<th>Network Operations</th>
<th>Field Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Operations</td>
<td>1</td>
</tr>
<tr>
<td>Network Maintenance</td>
<td>5%</td>
</tr>
<tr>
<td>Network Administration</td>
<td>25%</td>
</tr>
<tr>
<td>Inventory Management</td>
<td>25%</td>
</tr>
<tr>
<td>Site Operations</td>
<td>45%</td>
</tr>
<tr>
<td>Site Maintenance</td>
<td>45%</td>
</tr>
<tr>
<td>Site Administration</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: Booz & Company analysis
Attitudes toward outsourcing core network functions vary much more widely, however. A significant percentage of operators insisted they would not consider outsourcing either their core network operations or network administration. Certain network operations functions, including capacity management, network planning, and end-to-end performance management, they argued, enable them to differentiate themselves from competitors. Fewer operators objected to outsourcing network maintenance, and none objected to outsourcing inventory management. Companies operating across geographic boundaries, in particular, have seen outsourcing as an opportunity to consolidate their inventory management function with a single vendor on a group scale.

While the case for outsourcing field services is strong, operators that have yet to do so cited the inability to realize savings as the primary reason for waiting. For some smaller mobile operators and small operating groups, we found, the cost reductions promised were too small to justify the decision to outsource. For other, larger operators, their potential providers simply couldn’t achieve the necessary benefits of scale in-country. And some large fixed-line incumbents expressed satisfaction with the efficiencies they were achieving in-house. Finally, operators in certain regions noted that their labor costs were simply too low to bother with outsourcing.

Eventually, we believe, as network services become increasingly commoditized, concerns about service as a differentiator will wane. Primarily, network services will become indistinguishable to the customer, and the urge to keep cutting costs will make network operations an increasingly tempting target. At the same time, innovative vendors will begin to offer higher levels of service than operators can achieve in-house, further encouraging them to outsource.

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WHO OUTSOURCES?

The willingness to consider outsourcing, while common among most of the operators we surveyed, depended to some degree on both the business they were in and where they were located. Multinational mobile operators and cable companies were the most willing to outsource. European fixed-line operators were less likely to outsource than mobile carriers, thanks primarily to concerns that the complexity of fixed-line operations increased the risk of transferring control to outsourcers, and might actually increase costs in the short-term as vendors struggle to manage that complexity (see Exhibit 5). Mobile operators in Europe were typically more likely to outsource than those in other regions, where the cost benefits were harder to realize.

While we expected that several factors—such as pressure from corporate headquarters or experience with outsourcing other functions such as...
as IT or human resources—might influence the decision to outsource the network operations as well, few operators recognized any reasons other than the determination to cut costs from network operations. While some large multinational groups made their outsourcing decisions on a local case-by-case basis, others recognized outsourcing as a company-wide strategic goal.

We had expected that respondents would view local employment legislation and trade union power as a significant barrier to outsourcing. Yet that turned out not to be true. Employment legislation and unions, respondents said, primarily created a process that had to be followed, not a real barrier. Indeed, one northern European operator noted that it had dealt with a union that supported its outsourcing efforts as being the best way to avoid overall loss of jobs and to allow its members to work across more operators. A more likely barrier: the cost of any layoffs resulting from outsourcing.

Nor was the advent of new technologies, such as next-generation networks, seen as a significant barrier, though some operators said they would likely outsource older technologies while keeping new ones in-house. On the other hand, several fixed-line incumbents pointed out that equipment manufacturers might be better placed to assist in the transition to next-generation technologies than their own workforces.

Whatever barriers do remain, we believe, will fall under the pressure to cut costs. Providers will offer more and more sophisticated services, enabling even the largest incumbents to outsource complex legacy systems and processes with confidence. And the very scope and scale of those incumbents will entice more and more specialized providers to offer services that will be increasingly tailored to their complex needs.

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WHICH VENDORS?

The great majority of operators we surveyed—more than two-thirds—preferred to work with a single service provider, for several reasons:

- Using one vendor gave them access to greater efficiencies than employing “best of breed” suppliers for different functions.
- Single outsourcers, respondents noted, made managing the outsourcing arrangement easier and allowed them to hold that one vendor accountable.
- Some respondents expressed concern that a multiple-provider approach would require an extra layer of management to oversee the interface between providers.
- Several of the smaller mobile operators doubted that the multiple-provider approach would enable individual vendors to achieve the scale they needed to meet their cost savings goals.

On the other hand, 25 percent of operators—mostly large ones—preferred a multi-vendor approach to outsourcing, citing three primary benefits:

- Internal competition: Both fixed and mobile operators saw a key advantage in being able to maintain an element of competition between different providers. Competition, in this view, would promote performance improvements and process innovation. The strategy would also avoid placing too much responsibility and power in the hands of a single provider and eliminate the risk of being “held to ransom” by that provider.
- Best of breed: A multi-vendor approach forces each outsourcer to provide the best solution for each element of the outsourcing deal in order to win it, creating solutions that are more tailored to operators’ needs. Several fixed-line incumbents noted that their scale was particularly well suited to an approach that allowed them to select the best providers for each function being outsourced.
- Visibility into costs: A multi-vendor strategy allows operators to negotiate separately for each element of the total outsourcing package, providing a clear view of the cost of each element, and the potential for greater cost savings.

So far, however, the great majority of network servicing contracts have been awarded in single-source deals to telecom equipment manufacturers—primarily Ericsson and Alcatel-Lucent—no matter which vendor
Booz & Company manufactured the equipment in the networks. Indeed, we found many examples of equipment manufacturers winning deals to operate and maintain equipment from rival vendors. Given the degree of consolidation in the telecom industry and the number of recent network-sharing announcements, the traditional equipment manufacturing business is coming under more pressure than ever, pushing manufacturers to prove their outsourcing capabilities. Ultimately, we believe, this will create a significant opportunity for vendors to manage network functions across multiple operators.

Fixed-line operators are much more likely to consider independent providers than are multinational mobile companies—in both network operations and field services. That may be because these operators, especially incumbents, typically have much larger workforces than mobile operators, and that offers greater potential for specialized players to deliver tailored services at the scale needed. In contrast, many mobile operators are more likely to have deep relationships with the vendors that were involved in planning and building their networks. This in itself presents an opportunity for the large equipment manufacturers to offer compelling solutions for fixed-line players as well.

In choosing their network and field services outsourcers, we found, most operators conduct lengthy and expensive request-for-proposal (RFP) processes. The technical proficiency of candidates is critical to the selection process, but not whether a prospective outsourcer also made the equipment that runs the operator’s network (see Exhibit 6). Equally important is whether the candidates maintain a strong local presence, given just how resource-intensive many of these network and field operations can be. Indeed, we found that most operators did not view a vendor’s strong presence in neighboring countries as adequate to their needs; operators said they would rather share in-country resources—and savings—with their competitors than risk cross-border resources being stretched too thin.

The current preference for single-source solutions, we believe, will weaken as operators become more sophisticated in their ability to choose and manage vendors. Growing concerns over the lack of competition in the outsourcing market suggests a real opportunity for specialized providers to win business, particularly since operators no longer feel it is absolutely necessary to outsource services to the same vendor they buy their equipment from.

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**Exhibit 6**

Vendor Selection Criteria

<table>
<thead>
<tr>
<th>Rationale for Supplier Selection (%) of Respondents Citing Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Value Offered</td>
</tr>
<tr>
<td>Technical Capability</td>
</tr>
<tr>
<td>Local Presence</td>
</tr>
<tr>
<td>Reputation</td>
</tr>
<tr>
<td>Track Record</td>
</tr>
<tr>
<td>Existing Equipment Supplier</td>
</tr>
<tr>
<td>Met Specific KPIs</td>
</tr>
<tr>
<td>Met Required Timeline</td>
</tr>
</tbody>
</table>

Source: Booz & Company analysis
OVERALL SATISFACTION

Just how happy are operators with their network and field operations outsourcing arrangements? More than 80 percent of the operators we surveyed said they were either satisfied or very satisfied with the service they currently receive from their outsourcers, and a similar number agreed that they would outsource to the same extent if they had to make the choice again. However, that number drops to 60 percent when asked if they would outsource to the same provider again. Why the discrepancy?

Some operators put the blame on their outsourcers, noting a degradation of service when the arrangement was first implemented. Others believed that their supplier failed to devote adequate resources to the task. Still others thought their outsourcers seemed disengaged, didn’t fully understand their needs, and instead resorted to generic solutions.

At the same time, many respondents conceded that part of the problem might have been the result of internal issues—ineffective supplier management, lack of proper supplier incentives, and too great a focus on cost during the vendor selection process, rather than on quality of service or availability of vendor resources. As operators and vendors alike have gained more experience in planning, executing, and managing the outsourcing process, they have learned some valuable lessons and developed useful best practices for the industry.

In general, operators must ensure that they plan for and enter into any outsourcing agreement carefully—and then continually monitor the performance of the vendors they choose. Specific areas to consider:

- **Internal issues:** More than 50 percent of the operators we interviewed cited the need to address internal process issues prior to outsourcing, rather than viewing the outsourcing as a solution to internal process problems. As one respondent put it, “Don’t outsource things you do not understand, or processes that are broken.” By the same token, operators must be selective about which functions they outsource; it is critical not to automatically try to include everything.

- **Timing:** Respondents agreed that it is critical for operators to give themselves at least three or four

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months to prepare for operations to be outsourced and to understand in detail the functions, activities, and responsibilities of all the players. Furthermore, said one respondent, “make sure that the provider’s operational capabilities are ready to go today, and not still under development.”

Don’t assume that network operations can be given over to the outsourcer without an overlap period. Operators should keep critical staff members in-house long enough to ensure that the transition has gone smoothly. At the same time, noted one respondent, “once the decision has been taken to outsource, the speed of implementation is important. It should occur quickly to avoid paralyzing the organization for any period of time.”

• **KPIs:** More than 90 percent of respondents emphasized the importance of establishing clear vendor KPIs, preferably as early as during the initial RFP process. They should never be established as a point of renegotiation. Several large mobile operators noted that setting KPIs above historical performance levels can help drive service improvement.

Operators also cited the importance of tracking and managing KPIs through an accurate and timely audit process; without that, the KPIs are unlikely to have any meaning. In the words of one respondent, “Contractually, you must have audits and service benchmarks to keep up the competitive nature of delivery.” Respondents also recommended the use of a carefully balanced scorecard to keep providers from reducing service staff and to make sure they don’t focus on one area to the detriment of others.

Vendors, on the other hand, can work to ensure that they are providing the best possible service to their clients in order to create and maintain a high level of confidence in their ability to deliver on their promises. Particular areas of focus include:

• **Service delivery:** Meeting service commitments, with respect to functional expertise, service levels, and resources, is critical to vendor success. Operational employees with the necessary expertise need to be maintained at levels adequate to meet contracted KPIs. And clients need to be given a reasonably high degree of visibility into the costs they incur, and why.

• **Innovation:** Vendors can keep current clients and attract new ones that have yet to venture into outsourcing by constantly striving to create compelling, innovative new service offerings. Vendors that can develop such offerings—and particularly the ability to manage operators’ core network operations—can gain a significant competitive advantage over their rivals.
LOOKING FORWARD

The trend toward telecom operators outsourcing their network and field services operations is growing. Many operators have already engaged in the practice, and most of those who haven’t are quite willing to consider doing so. The reason is simple: to reduce their OPEX spending levels as they prepare to focus on their core business and pursue investments in strategic growth. Meanwhile, as their business environment becomes more competitive, the large telecom equipment manufacturers that currently provide the majority of outsourcing services will be pushed to upgrade their offerings through higher service-level guarantees and process innovation. And as more specialized vendors emerge, they are introducing a healthy level of competition into the market, offering best-of-breed services in a number of critical areas.

With these trends already in place, operators and vendors alike would be wise to consider their longer-term outsourcing strategies. We see a number of changes on the horizon that will affect the telecom outsourcing market over the next several years:

- As network service becomes increasingly commoditized, operators will become more willing to outsource core network functions, driving the next wave of cost-cutting initiatives.
- Operators will begin looking beyond cost reduction to process and service improvement as a reason to outsource. This trend will be driven in large part by vendors’ ongoing efforts to upgrade their offerings through enhanced services and process innovation.
- So far, fixed-line incumbents have been the most reluctant group to outsource. That will change, as providers begin offering more sophisticated solutions that can accommodate incumbents’ massive and complex legacy systems and processes. And the incumbents’ sheer scale will promote the rise of more specialized vendors that can offer services tailored to their various needs.
- The great majority of outsourcing contracts currently go to telecom equipment makers in single-source deals. Operators’ fears of a lack of competition, however, will encourage the emergence of more specialized vendors.
- Expect the large vendors to improve service levels and become more innovative in their network service processes as they respond to emerging competitors and to demands from operators as they grow more sophisticated in the design and management of their outsourcing arrangements.
- As operators learn from their outsourcing experiences, they will become more demanding in what they expect from vendors. As a result, vendors will become more realistic in what they offer, and more transparent in what they deliver.

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