Company Profile

Ericsson OSS

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1 Executive summary

Ericsson’s OSS/BSS suite provides a comprehensive footprint of telecom-specific software and services for managing the operations of communications networks, and the associated business support functions. Ericsson’s OSS products are organized into Business Process Suites which are aimed at specific business processes within communications service providers (CSPs). The Business Process Suites also include Ericsson’s SDP (called Service Enablement by Ericsson) solutions, in order to establish better integration of traditional OSS and Service Enablement capabilities.

1.1 OSS is a key part of the overall Ericsson telecom strategy

Ericsson characterizes OSS as a key component of its strategy in telecommunications, built on four pillars:

- excel in networks
- expand in global services
- extend in support solutions (focused on building business in OSS and BSS, TV and media management, as well as m-commerce)
- establish leading position in enablers of a networked society.

Ericsson describes OSS as a key differentiator for its clients and for Ericsson itself. Its significant acquisition actions demonstrate its commitment. Much of Ericsson’s OSS product portfolio comes from the extensive acquisition activity that the company has been undergoing in the last five years. Chiefly, the acquisition of Telcordia in 2012 led to Ericsson being rated as the largest telecom software vendor, in Analysys Mason’s 2012 Worldwide Market Share report. Other acquisitions such as Optimi in December 2010 and ConceptWave in 2012 have resulted in Ericsson having the most comprehensive OSS/BSS offering in the telecom market today. Its many acquisitions in the services area have also bolstered its consulting and delivery capabilities.

Analysys Mason has long held the belief that for many reasons, CSPs will continue to provide services over multi-vendor networks. Ericsson Executives strongly express their commitment to providing multi-vendor support. While Ericsson’s OSS have always provided such support, the acquisition of Telcordia and ConceptWave has added a significant breadth of support to its portfolio which Ericsson is intent on growing further. Ericsson executives point out that a top Ericsson priority is to enable its customers’ strategies and for many customers, multi-vendor networks are key.

1.2 Ericsson has the most extensive product portfolio and a strong market position

The Ericsson product portfolio is so extensive that it covers every area of the Analysys Mason telecom software research taxonomy. Ericsson’s OSS, SDP, BSS & Services portfolio is addressed by three business units: Business Unit Support Solutions or BUSS (OSS/Service Enablement and BSS, as well as TV and Media, and M-commerce products – OSS is the focus of this profile), Business Unit Network or BNET (network/domain management and optimization), and Business Unit Global Services or BUGS (consulting & systems integration, managed & hosted
services and customer support). Ericsson’s strategy is to fully align product and solutions while keeping the individual products close to the organization that can both add value and leverage the product to the greatest extent possible. Figure 1.1 shows Ericsson OSS, BSS and Services products.

Figure 1.1: Ericsson’s BSS, OSS and Services products [Source: Analysys Mason, 2013]

Analysys Mason Research ranks Ericsson not only as the largest vendor (in terms of market share) in the telecom software (OSS/BSS/SDP) market as a whole, but also ranks it:

- first in service fulfillment
- first in service delivery platforms
- first in network management systems
- third in revenue management
- sixth in service assurance.
Revenue figures and breakdowns are all purely Analysys Mason estimates, as outlined in our *Telecoms Software: Worldwide Market Shares 2012* report.¹

This profile document will focus specifically on the Ericsson OSS products, with reference to their specification, competitive advantages, place in the market and the opportunities that they present to Ericsson in the telecom space. That said, it is important to note that Ericsson’s strategy is to align and integrate OSS, Service Enablement (SE) and BSS products and solutions as the lines between these segments are becoming more and more blurred.

## 2 Ericsson’s industry position

In Analysys Mason’s annual *Telecoms Software: Worldwide Market Shares* report, Ericsson moved from second place overall in 2011 to be the largest telecom software vendor worldwide in 2012. In addition to this, Ericsson is the leader in the network management systems, service delivery platform and service fulfillment segments, third largest in the revenue management segment and sixth largest in the service assurance segment. Ericsson’s leading position in these sectors is due to a combination of steady organic growth and vigorous M&A activity.

¹ The report is available at: http://www.analysysmason.com/Templates/Pages/KnowledgeCentreArticle1.aspx?id=13715#.UkFNEoYpJo4
Aggressive acquisitions over the last two years have seen Ericsson integrate some key products to its OSS/BSS portfolio, in a quest to create the industry’s only true complete single vendor solution for telecom software. Key among these acquisitions was Telcordia in 2012 and ConceptWave in September of the same year. The Telcordia product set consisted of network management systems, service assurance, service fulfillment as well as billing and revenue assurance products. The purchase of Canadian OSS/BSS firm ConceptWave brought cutting-edge catalog and order management products to the Ericsson suite. In addition to the acquisition of software vendors, Ericsson has made significant acquisitions of Consulting and Systems Integrators rounding out its capability around the world. For more information on these acquisitions please see figure 4.3.

The addition of these products, services and personnel means that Ericsson now features in every market in Analysys Mason’s telecom software research portfolio. Ericsson has put significant effort in 2012 and 2013 integrating these newly acquired products with its existing products to create a series of cohesive solutions, built specifically with CSPs in mind. This profile is focused on the structure of these solutions and their standing in the industry.

3 Financials and basics

**Figure 3.1: Ericsson company data [Source: Analysys Mason, 2013]**

| Year founded | 1876 |
| Headquarters | Stockholm, Sweden |
| Stock symbol | OMX: ERIC-A, OMX: ERIC-B, NASDAQ:ERIC |
| President | Hans Vestberg |
| Net Sales 2012 | USD33.8 billion |
| Employees | 128,000 (2012) |
| OSS, SDP & BSS product segment(s) | Revenue management (RM), customer relationship management (CRM), service assurance (SA), service fulfillment (SF), network domain management (NDM), Service Enablement, M-Commerce. |
| Geographic focus | Worldwide |
| Key partners | Accenture, HP, IBM and ESRI |
| Key customers | With over 500 customers in more than 180 countries, Ericsson serves nearly every major CSP in the world. Key customers include but are not limited to: AT&T, Bell Alliant, Entel, MTN, Rogers, Saudi Telecom (STC), Telefonica, Telia Sonera, Telkomcel, Telenor, T-Mobile, Telefonica, Turkcell, Tunisiana, Vodafone, Verizon, T-Mobile, BT, BskyB, Telecom Italia, Swisscom, Level 3, Sprint, Telmex, Orange, Cox, and Telenor. In total, 500 CSP clients worldwide. |
Figure 3.2: Ericsson’s overall position in Analysys Mason’s annual Telecoms Software Market Share [Source: Analysys Mason, 2013]

Figure 3.3: Breakdown of Ericsson’s revenue by service sector [Source: Analysys Mason, 2013]

Figure 3.4 provides a list of Ericsson’s primary OSS, SDP and BSS software solutions for the CSP market. Ericsson has a strict definition for its commercial off-the-shelf (COTS) solutions, much stricter than that of many other vendors. Ericsson aspires to meet all of these characteristics across their products and solutions:

- based on modern software architecture
- use a common information model
- have a consistent user interface
- are pre-integrated, pre-configured and, if required, pre-populated
- provide end-to-end support for operator business processes
- are catalog-driven
- use a common execution environment
- include common monitoring and configuration interfaces
- exhibit a common licensing framework with perpetual and subscription pricing
- are cloud-ready and cloud-enabled
- provide unified reporting across all feature sets
- support single sign-on for users across the multiple systems.

In addition to this, Ericsson’s BUGS organization offers customization on the existing solution sets and a full portfolio of surrounding services, including:

- managed or hosted services
- systems integration
Ericsson has done an unusually good job at integrating its internally developed and acquired systems and has very quickly created consolidated suites that can address the largest breadth of capability of any vendor. Figure 3.4 provides the highlights of Ericsson’s newest OSS solutions.

**Figure 3.4: Ericsson’s latest OSS solutions [Source: Ericsson and Analysys Mason, 2013]**

<table>
<thead>
<tr>
<th>Solution</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Order Management</td>
<td>The Mobile Order Management solution is a turnkey package spanning the pre-order, order, service fulfillment, activation and billing functions. This catalog-driven solution provides a set of componentized product models, fulfillment flows and componentized charging functions to enable faster time to revenue. The solution includes the following products in a pre-integrated, pre-configured bundle: Catalog Manager, Order Care, Multi Activation and the CBIO billing module.</td>
</tr>
<tr>
<td>Plan-to-Provision for Mobile Networks</td>
<td>Plan-to-Provision for Mobile is a service fulfillment solution for network provisioning and expansion. The bundle contains many Ericsson OSS/BSS products aimed at building new cell sites, evolving to the latest technologies and expanding network capacity. The solution includes the following Ericsson products: Network Capacity Planner, Order Care, Multi Activation, Granite Inventory, Discovery and Reconciliation, RAN Configuration Manager and SON Optimization Manager.</td>
</tr>
<tr>
<td>Customer Experience Assurance</td>
<td>The Customer Experience Management offer can be used to ensure an optimal experience and deliver insights on how to further optimize that experience. The Ericsson approach leverages real-time capabilities in aggregation, advanced network event correlation and multi-vendor network support for network, service, device and user data. Experience insights can be used by CSPs to improve and optimize the end users’ overall experience in areas such as service usage, payment and experience to resolution scenarios. The offer provides unique insight though Ericsson Experience Manager which is a purpose built SQM product for monitoring services agnostically across any infrastructure as well as Customer Experience Assurance which empowers Customer Care and Service Operations Centers with real time capabilities on customer experience to make decisions faster.</td>
</tr>
<tr>
<td>Service Enablement</td>
<td>The Service Enablement portfolio provides a set of packaged solutions covering common telecom application services creation &amp; execution, controlled exposure of operator assets, dynamic consumer experience &amp; interaction over on-line channels and M2M. The solutions; Unified Service Exposure, Multiscreen Self-Care &amp; Storefront, Converged Service Studio and M2M Service Enablement are based on a common platform, Ericsson Service Enablement Platform, which includes the following Ericsson products; Multiservice Delivery Platform and Composition Engine.</td>
</tr>
</tbody>
</table>

The component systems of these strategic solutions are shown in Figure 3.5. The OSS, SDP, Network and Domain Management products are all aligned, with Ericsson stating its commitment to improve the integration and consistency across its entire product line.
Ericsson’s OSS products are listed and described in detail in Figure 3.6.

**Figure 3.6: Ericsson’s OSS products organized by business process suite [Source: Analysys Mason, 2013]**

<table>
<thead>
<tr>
<th>Product</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plan-to-provision</strong></td>
<td><strong>Engineering systems</strong></td>
</tr>
<tr>
<td>Network Engineer</td>
<td>Network Engineer is a GIS-based NMS for planning, designing, deploying and managing</td>
</tr>
<tr>
<td></td>
<td>communications networks. The product is designed to speed the planning and design phase of</td>
</tr>
<tr>
<td></td>
<td>network provisioning. The Network Engineer GUI provides a single view of network topology</td>
</tr>
<tr>
<td></td>
<td>including object relationships, geospatial rendering, network schematics, and Web-based</td>
</tr>
<tr>
<td></td>
<td>planning, which builds a unified model for both inside and outside plant. Network Engineer's</td>
</tr>
<tr>
<td></td>
<td>integrated inventory allows complex logical modeling for all physical networks to all</td>
</tr>
<tr>
<td></td>
<td>locations, equipment, circuits, assignments, services and customers.</td>
</tr>
<tr>
<td>Network Capacity Planner</td>
<td>Network Capacity Planner is a 2G/3G/LTE product that identifies the resources needed to</td>
</tr>
<tr>
<td></td>
<td>fulfill the required QoS. It covers RF interface, the RAN and underlying transmission</td>
</tr>
<tr>
<td></td>
<td>facilities. The product is primarily used for strategic planning to optimize network</td>
</tr>
<tr>
<td></td>
<td>dimensioning, where opex and capex are known to be unnecessarily high. Network Capacity</td>
</tr>
<tr>
<td></td>
<td>Planner also runs ‘what if’ scenario analysis to estimate the cost impact of strategic</td>
</tr>
<tr>
<td></td>
<td>decisions such as launching of new services, terminals and service tariffs.</td>
</tr>
<tr>
<td>Product</td>
<td>Details</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Optical Network Planner</td>
<td>Optical Network Planner is a multi-layer multi-technology network planning tool that allows CSPs to plan, develop, manage and upgrade their transport network. The product’s key features are a capacity planning function with advanced bottleneck and network availability analysis, failure simulation analysis, routing and wavelength analysis for automatic circuit provisioning, a network configuration tool and bill of materials generation.</td>
</tr>
<tr>
<td>Frequency Optimizer</td>
<td>Frequency Optimizer enables the periodic fine tuning of frequency plans to maintain optimum performance – in particular after physical RF changes and/or modifications in traffic management strategies. It also supports spectrum carving activities to accommodate new technologies.</td>
</tr>
<tr>
<td>Cell Optimizer</td>
<td>Cell Optimizer is an RF design tool for optimizing cell design for each network technology (the product supports GSM, WCDMA/HSPA and LTE). The product can produce a ‘one-shot’ evaluation of an entire multi-technology network and an optimization plan for RF cell redesign or for roll-out of greenfield networks. Cell Optimizer uses call trace data RF propagation measurements and call traces to produce real-world optimization maps on a single-view GUI.</td>
</tr>
<tr>
<td>RAN Analyzer</td>
<td>RAN Analyzer is an integrated performance monitoring and troubleshooting tool for assisted network optimization through real-time analysis of live network data. It collects and processes content management, product management, fault management and call traces, and is able to correlate all sources of information to automatically find worst offenders, root cause analysis and propose actions to resolve network problems. Through its geo-location module, it is able to produce geo-located maps to assist in the process of planning and troubleshooting of problems in the radio network.</td>
</tr>
<tr>
<td>RAN Configuration Manager</td>
<td>RAN Configuration Manager is an integrated configuration management platform that processes all information concerning parameter settings in a multi-vendor and multi-technology RAN. RAN Configuration Manager is chiefly used by CSPs for network reconfiguration campaigns, parameter audits and generation of configuration reports, network expansions, topology modifications and node integration.</td>
</tr>
<tr>
<td>SON Optimization Manager</td>
<td>SON Optimization Manager is a network management system for the automatic optimization of multi-technology radio networks. It adjusts autonomously some key cell parameters to ensure that the network works at its best anywhere and anytime, even in a continuously changing environment. SON Optimization Manager implements those SON use cases which are not required to be executed in real time. It is multivendor-capable, which allows it to be used across the whole RAN by all operators.</td>
</tr>
<tr>
<td>SON Visualization</td>
<td>SON Visualization is a single workplace for monitoring automatic management activity on the network. It supports visualization and correlation of activity and network performance indicators.</td>
</tr>
<tr>
<td>SON Policy Manager</td>
<td>SON Policy Manager helps operators create and set policies that dynamically steer the automatic behavior of a network. It has a customizable rules engine and is capable of working with all major access technologies and vendor equipment types.</td>
</tr>
</tbody>
</table>

**Lead-to-service products – Service fulfillment**

| Catalog Manager              | Catalog Manager is a key product in the Ericsson OSS portfolio, allowing CSPs to create new products and services from reusable components with component and rule creation and process orchestration enablement. Catalog Manager defines, introduces, manages, and retires product and service offerings across various distributed environments. Key components of the product are: Product Lifecycle Designer (which manages the lifecycle of product, services, offers and resources), Service Catalog (which stores technical information about the provisioning process and service order management) and Velocity Studio (which graphically manages data models, business rules, workflow and user/system interfaces). |
Remote Device Manager is answering many of the initial deployment problems with a single platform that supports various other popular protocols such as OMA DM, OMA CP, SMS-based proprietary, SNMP, device client-based and SIM OTA. In the M2M space, Remote Device Manager is answering many of the initial deployment problems with a single management API regardless of service and device type, unifying the interface across multiple verticals and services.
Network IQ Events is a product designed to simplify network troubleshooting by enabling operation teams to deep dive into their network data, sorting and analyzing network events, to analyses terminal behavior, prioritize and diagnose faults, or follow up individual subscriber problems. The product enables root cause analysis, targeted support, advanced roaming support and the audit of network terminal events.

Network IQ Statistics is a performance monitoring tool for planning network capacity, monitoring performance and addressing quality-of-service issues in networks with high data volume. The product allows capacity planners to identify and avoid potential bottlenecks and most effectively deploy new upgrades to maximize the benefits from hardware investments. The software is multi-vendor and multi-technology compatible.

Vendor Domain OSS - Element and network management systems

OSS-RC is a domain manager for Ericsson network infrastructure. It integrates and manages a broad portfolio of network components covering the RAN, circuit and packet core and IMS. It includes a wide range of automation and other features for efficient roll-out, operation and troubleshooting of wireless and wireline networks.

Wi-Fi Manager is a network and element management system for Ericsson Wi-Fi equipment which provides centralized network monitoring and management. It can also be integrated with OSS-RC for mobile operators. Wi-Fi Manager provides tile-based mapping in a GIS-centric graphical interface, allowing for networking at a glance monitoring and rapid network visualization.

IP Transport Network Manager is the integrated and end-to-end O&M solution for Ericsson’s 4th generation IP and broadband portfolio covering IP and transport products used in mobile backhaul, metro, IP edge, core and fixed-mobile converged networks. It simplifies the management of network services for simple, flexible and efficient operation.

IP Transport Network Manager also integrates the ServiceOn Element Manager and NetOp element management products.

Customer/partner management and interaction

Ericsson’s portfolio in the service-enablement domain offers solutions for CSPs to improve loyalty with personalized and optimized user experience on any screen, and to drive business innovation by efficient monetization and exposure of business assets, services and network capabilities. The solutions are based on a common platform, the Ericsson Service Enablement Platform, providing a foundation consisting of common functionality for flexible service creation, execution, composition and exposure as well as providing a dynamic user experience across digital channels. Service Enablement Platform is derived by two main software products: Multiservice Delivery Platform and Composition Engine. Currently Ericsson provides five main business solutions on top of its Service Enablement Platform in parallel with custom-built solutions developed in collaboration with customers: Unified Service Exposure, Multiscreen Self-Care & Storefront, Converged Service Studio and M2M Service Enablement.

As shown in Figure 3.5, the OSS/BSS products are presented by Ericsson in five separate business process suites, namely: Idea to Implementation, Plan to Provision, Lead to Service, Service to Cash and Experience to Resolution. Each of these business process suites is designed specifically to bundle key software products into a package that meets the common business challenges within a CSP. These products map into the Analysys Mason taxonomy as seen in Figure 3.7 below.

Ericsson has identified five strategic focus areas for its OSS and service-enablement offering, namely:
- customer experience
- big data and analytics
- cloud and SDN
- connected devices
- automation and optimization.

These focus areas, which will evolve and change over time, are driven by dedicated teams accountable to senior executives. The strategic focus area leads act as champions for enabling product and solution evolution to support current and emerging industry needs. The approach appears to be highly effective and is designed to result in the introduction of new products and solutions to address the requirements of CSP’s and network and service providers in other industry verticals.

Examples of new capability realized by Ericsson OSS via this strategic, focused approach include: a telecom-specific analytics enabling layer, human mobility analytics, marketing analytics and campaign management, electrical vehicle charging and more. Ericsson has already seen success implementing connected vehicle cloud solutions for companies like Volvo Car Corporation which now offers cloud based services in their cars to anyone buying a Volvo. Other examples of recent Ericsson wins in the Connected Device space include support for AT&T’s cloud-based remote patient monitoring and enabling the Stockholm Royal Seaport’s smart city which includes support for smart grids, smart metering, smart homes and electric vehicles.

*Figure 3.7: Ericsson’s position in Analysys Mason’s telecom software market segmentation [Source: Analysys Mason, 2013]*
4 Customers and markets

Ericsson’s OSS customer base is made of several hundred CSPs worldwide and represents a virtual “who’s who” in the CSP business. Furthermore, Ericsson has successfully sold to other companies managing networks in different verticals. Ericsson provides customer references on a per-request basis. Below are some telling customer statistics shared by Ericsson:

- Over 1 billion subscribers are activated via Ericsson Solutions
- 300+ service fulfillment installations with approximately 60 inventory, and 40 modern next generation catalogue & order management solutions.
- 800+ million subscribers activated via Ericsson Device Management solutions
- 200+ installations using Ericsson planning, engineering and optimization of their networks
- 500+ installations using Ericsson service assurance solutions with approximately 20 solutions focused on Customer Experience.
- 1,500 Consulting and systems integration projects annually and 16,000 consulting and systems integration professionals.

Ericsson’s portfolio is becoming more productized as seen in Figure 1.3. According to Analysys Mason research product licenses now represent 41% of the total 2012 revenue, with product-related services representing 61%. This is in keeping with the philosophy of the former Telcordia products, which traditionally had the lowest ratio of product-related services to product license fees of the major vendors. Ericsson is continuing that philosophy to keep the implementation cost as low as possible and is further developing it through an aggressive program to provide preconfigured products and solutions.

In addition to revenues from its products, Ericsson generates significant revenue by offering a broad set of services from OSS strategy and planning through to implementation and even hosted & managed services. Figure 4.1 shows the estimated breakdown of Ericsson’s OSS revenue by products and services.

Ericsson is the single largest provider of managed services and outsourcer of telecom operations in the world, managing the networks and services for over one billion subscribers worldwide. To date, operators have transferred over 30,000 operator staff to Ericsson’s Managed Services organization (BUGS). This extensive hands-on operations experience translates into world-class expertise that many CSPs see as a huge differentiator. The majority of Ericsson’s OSS/BSS revenue comes from the mature markets of NA and EMEA, which between them represented three quarters of its total revenue in 2012, as shown in Figure 4.
As mentioned earlier in this document, Ericsson has pursued an aggressive M&A program. Figure 4.3 provides a list of the key OSS and BSS vendors & services companies that have been added to the Ericsson family over the last three years and have had a significant impact on the Ericsson portfolio.

**Figure 4.3: Ericsson’s M&A in the OSS segment [Source: Analysys Mason, 2013]**

<table>
<thead>
<tr>
<th>Date</th>
<th>Acquisition</th>
<th>Type</th>
<th>Transaction value (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 2013</td>
<td>Microsoft Mediaroom</td>
<td>IPTV platform</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Sept 2013</td>
<td>TeleOSS</td>
<td>OSS consulting</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Sept 2013</td>
<td>Telcocell</td>
<td>BSS Consulting</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>May 2013</td>
<td>Devoteam</td>
<td>OSS/BSS Consulting</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Sept 2012</td>
<td>ConceptWave</td>
<td>OSS/BSS</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Jan 2012</td>
<td>Telcordia</td>
<td>OSS/BSS</td>
<td>USD1.15 billion</td>
</tr>
<tr>
<td>Apr 2011</td>
<td>Tridge Group</td>
<td>BSS consulting</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Dec 2010</td>
<td>Optimi</td>
<td>Network management &amp; optimization</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Feb 2010</td>
<td>Pride Group</td>
<td>OSS consulting &amp; SI</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Sept 2010</td>
<td>InCode</td>
<td>OSS/BSS Consulting</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>May 2009</td>
<td>Bizitek</td>
<td>BSS Consulting &amp; SI</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Jun 2007</td>
<td>Drutt Corporation</td>
<td>Service delivery</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>Jun 2007</td>
<td>LHS</td>
<td>Billing</td>
<td>USD420 million</td>
</tr>
</tbody>
</table>
5 Analysis

With its recent acquisitions, Ericsson has vaulted itself to the top of global providers of OSS and BSS software products. Ericsson’s senior executives are clearly committed and aligned in their efforts to integrate their entire OSS-related portfolio across all business units. Analysys Mason believes that the Ericsson approach to delivering network, services and software solutions to the market in a concerted fashion will provide significant value to its customers. Ericsson’s integration of the former Telcordia and ConceptWave products into its portfolio has been a model of M&A execution. As it deepens its integrations, sharpens its solutions and preconfigures its offers, it has the potential to continue to gain market share. And as it creates a more comprehensive services “wrapper” around these products, it also has the potential for substantial additional revenue growth. With its position as the only supplier that has nearly all of the software and services piece parts needed for operations, Ericsson has a chance to build a long-term competitive advantage with major operators that, increasingly, want to deal with fewer suppliers. Adding Ericsson’s network technology offers, Ericsson is positioned to solve operator problems in a way that no other vendor can.

5.1 Strengths

- Ericsson has a strong global brand, a reputation for innovation and for its long-term commitment to customers
- it is a profitable and stable vendor which customers can count on being there for the long term
- broadest portfolio of OSS and BSS products and accompanying services
- largest OSS supplier in the market
- good customer coverage in every region of the world
- constant access to its customers and intimate knowledge of their network deployments and business processes
- services business – pre-configurations and integrations can move from project to product
- ability to leverage network, software and services in order to integrate offers and provide bundled pricing and to increase value to its customers
- strong operations outsourcing business – the combination of the Ericsson teams, experienced in mobile operations, and the former Telcordia teams, experienced in wireline operations
- ability to leverage its knowledge of telecom network technologies and business processes to see the future more clearly.

5.2 Weaknesses

- Ericsson traditionally has been focused on the mobile market. To fully exploit its acquisitions, it must also serve the wireline market. This will require a broadening in the management’s and sales team’s focus to include many of the customers and issues of the former Telcordia and ConceptWave wireline customers.

- The U.S. regional telephone companies (RBOCs) are frustrated with on-going maintenance fees associated with the former Telcordia Legacy systems. Pressure from the RBOCs on Ericsson to reduce legacy maintenance fees while the RBOCs select their next generation OSS products creates unique challenges for Ericsson in sustaining the kind of significant North American revenues and healthy profits provided by the former Telcordia Legacy products.

- Comparatively weak in specific APAC countries where many CSPs have a tradition of buying from local vendors.
• Product gaps in service assurance: multi-vendor fault management at network level and probes.

• Limited number of pre-integrated solutions, as this work has just begun.

5.3 Threats

• All equipment vendors in the OSS and BSS business face some issues with multi-vendor support. Cooperation with other equipment vendors is more difficult than for independent software vendors (ISVs) while customers are sensitive to any signs of the vendor advantaging its own equipment in its OSS and (somewhat less) BSS features and functions.

• Ericsson’s traditional focus on the larger and more dynamic mobile OSS market could move the company’s attention away from the wireline market.

• Past systems integration and ISV partners of Telcordia & ConceptWave may see Ericsson as their competition and may, over time, eliminate these products from their integrated offers.

• Amdocs, NEC/NetCracker and Oracle, Ericsson’s three largest competitors, may seek to broaden their portfolios in the service assurance area, erasing some of Ericsson’s differentiation advantage. The recent move of Amdocs to acquire Actix is an example of this.

5.4 Opportunities

• Services wrapper – BUGS services wrapped around Ericsson software products provide excellent revenue growth opportunities.

• The growing CSP acceptance of what is termed in the TM Forum as ‘commercial operations-ready’ (CORe) systems, i.e. large, pre-integrated, pre-configured, off-the-shelf footprint systems and accompanying operations processes for greenfield and transformation projects, fits into Ericsson’s vision of its strategic solutions.

• With a strong presence in the self-organizing/self-optimizing network (SON) technology, Ericsson should be able to develop a robust services business around hybrid SON architectures, policy development and verification services.

• With its strong product portfolio, Ericsson stands to enjoy a significant opportunity increase in managed services (outsourced operations and hosted solutions) and transformation projects.

• The ability for Ericsson’s OSS & SE business to further integrate and cross-leverage its network, BSS, network/domain management, and even TV and media offers to improve value to its customers.
About the authors

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