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Give your customers what they want, when they want it. Even before they know they want it. Because delighted customers are your best advertisement.

Ericsson helps you REALIZE great experiences through an OSS/BSS that keeps both you and your customers informed and empowered in real time. An OSS/BSS that uses all the intelligence, from network to customer behavior, that delivers those “Wow!” moments.
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KEY FACTS

12,000 consulting and systems integration professionals

1,500 consulting and systems integration projects per year

#1 NUMBER ONE

NETWORK EQUIPMENT MANAGEMENT
COST CONSOLIDATION
Operating across the Nordic countries and Baltic regions, this operator faced high operational costs due to the large number of performance management solutions needed for its different technologies. By adopting a multi-technology, multi-vendor solution from Ericsson it has been able to consolidate its 2G, 3G and LTE performance management, saving money while putting a greater focus on its users and services.

FIXED AND MOBILE
Based on Ericsson’s Network IQ Statistics product, the solution manages both fixed and mobile networks, creating a stable performance management platform that handles large data volumes and reduces cost of ownership. The platform is easy to integrate and is designed to harmonize processes and reporting around network performance and capacity trend analysis.

SUPPORTING TECHNOLOGICAL DEVELOPMENT
The solution has already been implemented in several countries, and is now ready to support the technological evolution taking place in these areas. Its flexible reporting functionality supports the distributed stakeholders in their differing responsibilities within the Nordic operation – putting the information they need right at their fingertips.

CONSOLIDATED 2G, 3G AND LTE PERFORMANCE MANAGEMENT
A lot is being heard these days about Self-Organizing Networks (SON), but this is the first time we have experienced a true self-optimization mechanism that can be easily applied across our entire network and which yields significant performance gains. Moreover, it is already available for today’s networks, so we do not need to wait for new technologies in order to enjoy the benefits of self-optimization.  

– RADIO OPTIMIZATION MANAGER

TRUE SELF-OPTIMIZATION

SELF-ORGANIZING NETWORKS (SON) IMPROVE PERFORMANCE IN MADRID

> 3G CS traffic increased by 10 percent
> Accessibility improved by up to 20 percent
> HSPA data throughput increased by 20 percent
> Overall radiated power at base station reduced by 33 percent
> Dropped call rate figures improved

AUTOMATIC OFFLOAD

The project used a parameter optimization solution to automatically offload traffic between different 2G bands and accommodate it within existing resources. At the same time, it minimized the need to add unnecessary TRXs during the interim steps of the process.

IMPROVED EFFICIENCY

The result was improved accessibility and a marked increase in 3G CS traffic. HSPA data throughput also increased, reducing overall radiated power at the base station and allowing more traffic to be carried using the same infrastructure.

A COMPETITIVE ENVIRONMENT

A network optimization project has lately been trialed in Madrid, with the intention of creating a competitive urban radio environment. The project was applied to one Spanish operator’s UMTS/HSPA network, and is designed to identify the extent to which the solution can improve performance in an operational environment.
IMPROVED ACCURACY, EFFICIENT DESIGN

A Tier 1 European incumbent has taken steps to introduce the greater level of efficiency that is needed to support a new open access business model targeting tens of millions of people. The key objectives were to improve the accuracy of outside plant data, and supervise the efficient design and build of next-generation fiber access networks across the country.

TECHNOLOGY-SPECIFIC TOOLS

The solution uses Ericsson Network Engineer as the central platform for network design and records. It features the specialized Design Assistant module, together with next-generation fiber access technology-specific wizards, to automate the design process.

SIGNIFICANT SAVINGS

Network Engineer creates a single geospatial system for all outside plant data – which means no more paper records. Significant savings have been made in go-live districts alone, as well as from identification of network assets not listed on paper records. By extending the solution to fiber-to-the-premises (FTTP), neighborhood design time has been reduced from days to just hours.
CENTRAL EUROPEAN INCUMBENT SLASHES SERVICE PROVISIONING TIME

> 30 percent reduction in Order-to-Cash time
> 15 percent reduction in opex
> 4 percent reduction in capex

FAIR COMPETITION

A central European incumbent is supporting new business models by adopting faster and more integrated processes – allowing the government to ensure fair competition through the use of common ducts and conduits by multiple operators.

FULL SUPPORT

The project involved the use of several solutions: the Ericsson Network Engineer, Design Assistant, Granite Inventory and Customer Number Manager. In partnership with a regional systems integrator, this combination fully supports the necessary TM Forum standards, including eTOM and TAM.

IMPROVED NETWORK PLANNING

The success of the project resulted in significantly improved network planning, design, construction, documentation and maintenance. Marked reductions were seen in Order-to-Cash time following the application of 90 percent service provisioning automation, as well as reductions in capex and opex.

A centralized geo-database was used by external subcontractors in the design and build of the network, avoiding additional migrations and reducing total build-out time, error rate and cost.
AUTOMATED RF PLANNING AND OPTIMIZATION FOR EUROPEAN 2G AND 3G NETWORKS

> 15 percent more traffic at same quality level
> Reduced dropped call rate

AUTOMATED OPTIMIZATION

A European operator needed to improve its network performance and so commissioned automated planning and optimization for its 2G and 3G networks. In particular, the operator needed to meet the complex challenge of optimizing sector antenna settings, including azimuth, electrical tilt and mechanical tilt.

A DUAL SOLUTION

The project relies on two solutions: the Ericsson Automatic Frequency Optimizer (xAFP) and Ericsson Automatic Cell Optimizer (xACP). The first is an automated cell-planning solution for controlling the antenna tilt changes necessary to control traffic absorption between different 2G network layers. The second is a spectrum management solution designed to aid frequency planning.

SMOOTH TRANSITION

As a result of implementing the Ericsson Automatic Frequency Optimizer (xAFP) solution, there has been a significant reduction in dropped calls, improving what was already at a low level due to years of careful optimization. It has also enabled a smooth transition towards frequency planning techniques available in the OSS, helping to give a more accurate representation of network status than any other type of analysis.

Additionally, the application of the Automatic Cell Optimizer (xACP) to the UMTS network has shown marked improvements to both coverage and traffic, while maintaining the same quality level. Combining the most accurate input data with a sophisticated modeling and optimization engine guarantees that the designs produced are of the best possible quality.

We truly recommend Automatic Frequency Optimizer (xAFP) and Automatic Cell Optimizer (xACP) for the automated optimization of cellular networks.”

– HEAD OF RADIO PLANNING PRINCIPLES, PARAMETERS AND FREQUENCIES
CREATING A MARKET LEADER

A European operator recently set out to launch a range of high speed mobile services that would allow it to offer an improved level of performance to its customers. The project was designed to address various opex, capex and interoperability issues, in addition to gaining overall market leadership.

A COMPLETE TRANSFORMATION PROJECT

The process involved a complete transformation project which saw the swap of 2,500 base stations. A Full Service Broadband solution was designed and implemented, including 2G and 3G radio access, circuit-switched and packet-switched cores, user management, OSS and associated services. The accelerated 3G rollout will remain within the required regulatory obligations.

ACCESS EVERYWHERE

As a result of the project, the operator was able to meet the market need for mobile broadband with DSL-comparable speeds, as well as increasing the wider availability of its broadband service. Having a high-performance network infrastructure means subscribers are now able to receive a level of service that was previously unavailable to them.

We turned to Ericsson as the market leader and once we began talking with them we gained a better understanding of what they could offer: technological leadership, capability to offer an end-to-end solution and significant presence in Ireland. All of these aspects were very important to us.

– ADVISOR TO CTO AND CEO OFFICE
KEEPING UP WITH THE COMPETITION

In a competitive market, keeping customer churn at a minimum is essential. A Tier 1 European mobile carrier is fighting churn by improving service quality and visibility for its wireless business customers, particularly those using data services on the BlackBerry platform.

VERSATILE SERVICE MODELS

Ericsson Experience Manager provides an insight into the quality of services by consolidating network data into service-level views for wireless data applications, including email service. The solution has been in production for five years.

INCREASED SATISFACTION

As a result of improved customer satisfaction, there has been a growth in BlackBerry services and a reduction in customer churn. The solution has also enabled the effective monitoring of issues that impact voice and data performance, such as dropped calls, handover failures, attach success ratio for data service sessions and packet data protocol (PDP) setup.

KEEPING SUBSCRIBERS HAPPY

REDUCING CHURN OF WIRELESS CUSTOMERS WITH IMPROVED SERVICE QUALITY MANAGEMENT
COMPREHENSIVE ORDER-TO-SERVICE SOLUTION ACHIEVES 98 PERCENT FLOWTHROUGH

- 98 percent service flowthrough provisioning
- 60 percent productivity improvement across automated pre-provisioning, fulfillment and fault repair
- Provisioning time interval reduced by 86 percent
- IPTV subscribers increased by 43 percent in 2010
- Broadband subscribers increased by 14 percent in 2010

OPERATIONAL OVERHAUL

A privatized Southeast European CSP has recently sought to reorient its business towards the customer, overhauling its operations infrastructure to offer a fuller range of services on next-generation networks.

COMPLETE AUTOMATION

An initial impact assessment of its next-gen ambition on its systems and processes was followed by the installation of a complete automated Order-to-Service solution. This comprised Granite Inventory with Discovery & Reconciliation, Broadband Activation, Workflow Director, Dynamic Catalog and Customer Number Manager. The solution supports TM Forum standards, including eTOM, TAM and SID.

SIGNIFICANT TIME SAVINGS

Following the implementation, IPTV and broadband subscriber numbers both grew substantially. Productivity showed marked improvements, as did service flowthrough provisioning, which saw a significant reduction in time intervals.

The time taken for optimal connectivity designs went from days to minutes. Day-long service interruptions were reduced to just hours. Operational data accuracy has improved, meaning more reliable process orchestration and new SLAs. The solution has also reduced time-to-revenue due to greater reusability of proven service components.
A FIXED ADVANTAGE
Mobile broadband operators have a challenge on their hands: to match the bandwidth and quality of service expectations set by fixed broadband operators. For most that means large scale network upgrade programs, executed quickly. One operator is rising to the challenge by using intelligent inventory solutions to automate and coordinate its extensive network alteration activities.

SUPPORTING MIGRATION
The project included Granite Inventory with Assign & Design and Ericsson Discovery and Reconciliation, along with data migration services.

ONE PLATFORM FITS ALL
Automation of capacity creation and network facility rearrangement tasks have allowed the operator to respond more rapidly to changing traffic demands.

By using a single platform to manage all of its radio access networks, along with improved, more detailed processes for capacity expansion, the operator was able to roll out its cell sites and upgrades much faster.

Granite Inventory provided a centralized inventory repository for use by network planners, repair technicians and systems. This resulted in reduced fallout and increased flexibility, along with accurate inventory data to support infrastructure sharing.
We were extremely happy with the solutions performance and the quality of the engineering resources that have been assigned to support the integration of these innovative solutions.”
– RADIO PLANNING & OPTIMIZATION MANAGER

AUTOMATED NETWORK PLANNING AND OPTIMIZATION IMPROVES NETWORK QUALITY

> 55 percent reduction in the number of samples with bad EC/LO
> 14 percent reduction in the number of samples with bad RSCP
> DL RxQual improved by 16 percent
> 55 percent reduction in the number of samples with bad EC/LO
> 14 percent reduction in the number of samples with bad RSCP

MANUAL PHASE-OUT

A European operator has streamlined its mobile measurements and OSS statistics by using automated network planning and optimization. Previous systems based on predictions, drive tests and manual decisions have been gradually phased out to make way for link, radio, core and transmission planning under a single platform. This allows all key processes to be aligned into a unified and integrated information flow.

THE RIGHT TOOLS FOR THE JOB

Ericsson was able to provide support to the operator using the following planning and optimization solutions:

– Ericsson Network Capacity Planner for the automated dimensioning of network infrastructure
– Ericsson Cell Optimizer for automated RF design and optimization
– Ericsson Frequency Optimizer for automatic frequency planning

The solution also included propagation predictions and analyses, automated optimization of key radio resource management parameters and automated geo-location of measurements and events.

STANDARDS OF EXCELLENCE

The successful deployment of Ericsson Cell Optimizer has led to a reduction in dropped call rates and handover failure rate by significant percentages, with DL RxQual also seeing equal improvements. The baseline configuration for this assessment was considered excellent by all standards.

Behind this lies a marked reduction in the number of samples with bad EC/LO or RSCP – the benchmark area being a dense urban environment with a high baseline performance level. In addition, there has been an increase in HSPA call ratio, a reduction in iRAT handovers related to bad radio conditions, and a general improvement seen in global RSCP distribution.
SMOOTH OPERATIONS
One quadruple-play operator has increased its new service launch capability by streamlining its operations and making improvements to service delivery.

AUTOMATED PROCESSES
The support system involved the implementation of Multi Activation and Systems Integration products. These automated provisioning solutions work to speed up activation, improve management of the customer lifecycle and facilitate instant change management. For users, this means an instant response.

INSTANT RESPONSE
The result is much faster activation times for new users, with processes that used to take hours now reduced to a matter of seconds. This has resulted in a decrease in the number of calls made to the customer call center, which in turn lowers operational costs.

We can activate, de-activate and change services with almost immediate effect. Now we can get customers up and running on our network in minutes, so they can make calls straight away and we can receive revenues more quickly. The service has been a great success, the number of transactions in the network has doubled and we have seen no problems.”

– DIRECTOR OF BUSINESS INFORMATION SYSTEMS
THE FIRST STEP

A Canadian mobile CSP is upgrading its network infrastructure to 3G – while taking on new customers with ever-higher expectations. To do this, it had to speed up the addition of new cell sites via faster rearrangement and reassignment of network facilities.

CENTRALIZED MANAGEMENT

This project was enabled by Granite Inventory, with an IP Address Manager module for the centralized management of core, transport and IP networks. Ericsson was also responsible for providing comprehensive data migration support throughout.

AHEAD OF SCHEDULE

The program resulted in a record launch of 373 3G EVDO sites in just one year. Four regional databases were merged into a single national database for the design, provisioning and maintenance of SONET rings, optical paths and leased facilities. The project was completed ahead of schedule with no disruptions or outages, and is now handling over 25,000 paths – a number which continues to grow.

Fast online field access to the latest network capacity information has allowed for detailed analysis and more efficient use of facilities, with a single platform supporting the management and allocation of all IP addresses.
A Tier 2 North American telecommunications incumbent has rapidly expanded its fiber-based broadband and triple play services to over 600,000 additional homes and businesses to counter strong competition from cable operators and offset a decline in voice revenues.

The rollout uses a new fiber technology that shortens time-to-market by using pre-measured and pre-cut fiber. But it also needed a new design automation solution to further reduce the plan-to-provision cycle – and meet the aggressive rollout plans.

The operator deployed a solution featuring Ericsson Network Engineer enhanced by automated design rules tuned to the operator’s own specifications. Supported by an onsite Ericsson team, the pilot project results demonstrated a compelling business case for a full roll-out.

The replacement of an antiquated, paper-based network design process has saved time and money. With the new solution tailored to take advantage of its new fiber technology, the company now has a significantly more efficient Plan-to-Provision process, with automated design, faster field installation, and elimination of complex field splicing. This has nearly halved the serving area design time.

The pilot project was a landmark in US telecommunications history, with the operator becoming the first in the country to cover an entire city with Fiber To The Home (FTTH) technology. The operator is now on-track with its USD 500 million FTTH rollout, delivering new services including a fully-digital TV bundle featuring HD channels. It is also experiencing low churn and reduced installation times.
SCALABLE GROWTH

A North American Tier 1 carrier acquired a number of new properties and wanted to rapidly deploy mass market broadband services across its enlarged portfolio.

However, with its current processes, significant growth in orders would have required an unacceptable rise in the number of people handling order fallout. To avoid this, the carrier needed to examine and revamp its entire order exception processes and focus on its new FTTx offer.

AUTOMATED PROCESSES

Ericsson worked with the carrier to develop and implement robust methods of cataloging and managing errors and provided tools to automate the process of correcting exceptions.

A key part of the solution was Ericsson Workflow Director, which was installed in 30 work centers and used by more than 1,700 personnel.

GREAT INVESTMENT

The carrier saved over USD 74 million thanks to improved order fallout triage, better root cause analysis, and mechanized exception handling.

The company reduced fallout by over 60 percent, saw an 80 percent drop in average time for handling remaining exceptions, and raised its rate of automated service order flowthrough from 55 percent to over 90 percent.

The bottom line: ROI of 300 percent while enhancing customer experience with an 80 percent reduction in due date misses.
A North American incumbent operator sought to bring its new services to market faster by reducing installation times and improving its response to trading partners. To support this, it needed to accurately identify network assets across all of its processes as the new services were deployed.

**SPEAKING THE SAME LANGUAGE**

Ericsson integrated its Granite Inventory with Assign & Design Module with existing systems to support customer provisioning. Ericsson’s COMMON LANGUAGE® was used across 15 systems enabling interoperability between networks, locations and customer systems.

**SUPPORTING NEW SERVICES**

As a result of Ericsson’s help, the operator achieved savings of USD 8.4 million across installation/repair dispatch, interconnection order processing, and spare parts management.

Increased automation has helped reduce service provisioning staffing requirements by 78 percent, enabled by nearly 100 percent flow-through provisioning for customers on its new next generation fiber access network.

The operator’s field technicians are up to 45 percent more efficient due to the better identification of circuits, facilities and locations, and with more accurate and accessible equipment information, asset tracking operations are 35 percent more efficient.
One North American Tier 1 wireline CSP has improved the handling of planned work items across all of its services and systems. The quick resolution of service order fallout and elimination of duplicate assignments, errors and delays, has led to less costly support of emerging services.

The solution centered around the implementation of two Ericsson fulfillment systems: Workflow Director and Customer Number Manager, with deployment support throughout the project including data migration services.

The solution eliminated fragmented views of workload, meaning faster handling of service order exceptions and planned activities requiring manual effort. It optimized staff utilization by assigning its technicians work suited to their skills, availability, and the needs of the business. And it created higher process flowthrough rates through the consistent monitoring of productivity.

The operator was able to achieve higher levels of operational accuracy for emerging services by managing the growing diversity of communication identifiers on a single platform. It was also able to address the impact of local number portability and reporting regulations.
MTTR reduced to under an hour
Ability to monitor more than 190,000 components using 12,000 key indicators
Processing capacity of 25,000 alarms every five minutes

EFFECTIVE DIAGNOSIS
A North American Tier 1 CSP has reduced faults and mean time to repair (MTTR) for a range of new triple-play services, using a unified toolset designed to improve the speed and accuracy of problem diagnosis.

PRACTICAL SYSTEMS
Ericsson Experience Manager was used to unify systems data, model individual and composite quality indicators, prioritize service degradations, and simplify monitoring using a dashboard approach.

SIMPLER OPERATIONS
With the system in place, the CSP gained the ability to monitor FTTP, DSL and VoIP service status in real time. MTTR has been reduced, and the company is now able to consolidate and correlate inventory and events from multiple fault, performance and trouble ticketing systems. The common platform has allowed it to simplify troubleshooting flows, and its processing capacity has increased to cover 25,000 alarms every 5 minutes.
A North American mobile CSP wanted to increase the number of daily jobs its field technicians could complete in response to capacity requests and maintenance/repair reports. At the same time, it sought to better pinpoint and respond to priorities through improved utilization of its ticketing system.

Rapid Integration
Ericsson’s experts first assessed the CSP’s current dispatch processes and business rules. Next, over a short 10-month window, they configured, integrated, and deployed Ericsson Workforce Manager to better utilize 2,700 field technicians while tracking their work.

A Faster Response
The new system enables the service provider to focus on priority work helping to ensure a superior customer experience. The solution has reduced response and travel times, aided by the integration of the Ericsson dispatch solution with the existing trouble ticket application.

NORTH AMERICAN MOBILE CSP EXPECTS TO SAVE USD 11 MILLION WHILE IMPROVING SERVICE QUALITY
98 percent of customer commitments met on time
> 10 percent increase in field technician productivity
> ~35 percent reduction in travel mileage
> 20 percent reduction in vehicle maintenance expenses
> Doubled the number of technicians that can be supported by each dispatcher

FLEXIBLE OPERATIVES
Challenging technical and market demands led a North American Tier one CSP to seek to improve its flexibility in dispatching field technicians. It also wanted to increase the speed at which their jobs were completed in order to raise efficiency and improve the customer experience.

SUPPORT ON THE GROUND
Ericsson assessed the service provider’s dispatch processes and business rules to help develop the best solution. The Ericsson Workforce Manager was rapidly configured with the rules and processes, integrated, and deployed to support 15,000 field technicians.

FEWER MILES, GREATER EFFICIENCY, HAPPIER CUSTOMERS
Ericsson's solution doubled the number of technicians that dispatchers could effectively manage. It resulted in a reduction in vehicle mileage and expenses, as well as an increase in the field technicians’ productivity. The company now completes 11 percent more out-of-service trouble reports within a 24-hour window and over 98 percent of customer commitments are now met on time.
QUALITY YOU CAN TRUST

NEW MONITORING SOLUTION IMPROVES MOBILE SERVICE QUALITY IN THE US

› 20 staff hours saved per outage resolution
› More than 250,000 objects monitored with 1,000 key indicators
› Delivery of service level data to work groups reduced from 45 minutes to seconds

ENSURING SERVICE CONSISTENCY
A nationwide US mobile operator sought to bring its service quality up to promised levels and maintain that same quality throughout major events and exceptional situations.

END-TO-END VIEW
The successful outcome was achieved through Ericsson Experience Manager, which unifies fault and performance data to provide an end-to-end view of service performance and is easily interpreted via management dashboards. Ericsson experts developed the underlying service quality management data models using key performance and composite quality indicators, essential for the robust analysis. Using more than 1,000 of the operator’s key indicators, the system monitors 250,000 network objects.

A POSITIVE IMPACT
Through real-time monitoring of service quality on multiple voice and broadband data service types, the operator has been saving an average of 20 staff hours per outage resolution. At the same time, the delivery of service level data to various work groups has been reduced from 45 minutes to just seconds. Improved root cause analysis has allowed the operator to isolate service problems with third party content providers.

The bottom line is that improved levels of service quality have positively impacted tens of millions of subscribers.
OPTIMIZING ASSETS

In order to improve the quality and efficiency of its network, one Central American operator has chosen to optimize its existing assets and network management resources by installing a complete, multi-vendor Network Management solution.

A COMPLETE SOLUTION

The implementation of the solution involved a combination of solution analysis, systems integration, learning solutions and OSS-RC knowledge transfer. Together, these systems help to drive growth and improve overall network quality.

INCREASED EFFICIENCY

The solution was delivered successfully and resulted in reduced repair time, more efficient use of resources and improved network quality. Automation and simplification of the fault management process was undertaken, as well as enhancements to trouble management procedures. A common trouble ticketing solution was also made available in the front office and network management organizations.

FACING LOCAL CHALLENGES

CENTRAL AMERICAN OPERATOR INSTALLS EFFECTIVE MULTI-VENDOR NETWORK MANAGEMENT SOLUTION

The success of this project has resulted in the strengthening of our company’s resource efficiency capabilities. This initiative with Ericsson ensures that we are better positioned to face our local market challenges and to take advantage of the potential that the region has to offer. With this project, Ericsson has moved into a consultancy role, sharing their experience in first-class network management. We look forward to working with Ericsson in the near future.

– CTO
TAKING THE INITIATIVE

In response to a government initiative, a converged Caribbean CSP sought to bring modern technology to businesses and the mass market. It aimed to efficiently build a modern, converged network which could offer advanced services such as IPTV and e-learning.

SYNCHRONIZED INVENTORY

To help launch the new services, Ericsson provided an OSS foundation to consolidate the company’s inventory on to a single framework in order to synchronize its inventory management, automate its provisioning processes, and more efficiently manage its data.

The solution included Granite Inventory with Assign and Design, Ericsson Discovery and Reconciliation, Ericsson Customer Number Manager, Ericsson Network Engineer, and Ericsson Integrated Inventory.

Custom integration services helped to deliver a more robust solution in a shorter timeframe.

MORE ACCURACY – LESS COSTS

With Ericsson’s help the service provider was able to get the new network into operation faster, speed up its service provisioning with fewer errors, and obtain more accurate network and service resource queries. It has also improved the visibility and data accuracy of its network assets enabling more efficient capacity planning. These benefits have collectively helped to reduce its capital and operational costs.

CARIBBEAN CONVERGED CSP USES TECHNOLOGY TO LIFT THE ECONOMIC STATUS OF ITS COUNTRY AND CITIZENS
A Latin American incumbent wanted to accelerate the delivery of consumer fixed broadband and enterprise data services to its subscriber base. A complete transformation of its fulfillment processes was needed in order to eliminate multiple disconnected systems that were the root cause of data inaccuracies and service order fallouts.

Supporting Revenue Generation

Following Ericsson’s assessment of the operator’s on-site processes and systems, the CSP chose a common platform to support Order-to-Service for its high revenue services. The platform included Ericsson’s Granite Inventory, Broadband Activation and Workflow Director.

Automated Advantage

The Ericsson solution resulted in 90 percent of the operator’s order-to-cash process becoming fully automated, including automatic activation of 3,200 multi-vendor network elements and millions of circuits. Better inventory tracking resulted in the recovery of more than 50 percent of its high-speed ports that were being occupied by low-speed users.

It led to a 65 percent reduction in provisioning time for private lines, with 95 percent of DSL customer orders now closing within 7 days. The number of complex enterprise orders closed within the target interval has also been improved.

With the capacity to process 180,000 service orders per month automatically, the operator’s business case objective of saving USD 50 million over a period of 6 years is well on the way to being realized.
Faced with the implementation of a WCDMA rollout, this South American operator launched a 2G re-farming project in order to make room for UMTS rollout in the 850 MHz band. Spectrum re-farming is not just about deploying frequency plans; it also involves key activities such as traffic offloading and antenna optimization. For this to be successful, it is important that all processes and tools are tightly integrated.

The method comprised three central components. First, the Ericsson Capacity Planner; an automated cell-planning solution controlling the antenna tilt changes required to manage traffic absorption between different 2G network layers. The second is the Ericsson Frequency Planner, a spectrum management solution for frequency planning. Finally, an automated parameter optimization solution that automatically offloads traffic between different 2G bands – accommodating all 2G traffic within existing resources while reducing the need to add unnecessary TRXs during the interim steps of the process.

By applying these modules in a coordinated manner, the operator now has the spare spectrum it needs. It is guaranteed a smooth and efficient transition with a high-performing 2G network, maintaining their previous KPIs within a lower spectrum.

As part of our initiative to cope with the increasing demand for mobile broadband data services in 3G/UMTS, we have carried out a 3G spectrum re-farming project in order to leave room for UMTS rollout in the 850 MHz band.

Optimi’s unique portfolio managed to obtain something that in principle looks counterintuitive. Working in a tightly integrated manner, the sequenced application of the different solutions managed to release enough 2G spectrum to deploy UMTS while maintaining network quality.”

– RF PLANNING SUPERVISOR

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MAKING A SMOOTH TRANSITION

3G SPECTRUM RE-FARMING LAUNCHED IN SOUTH AMERICA

MAKING IT POSSIBLE

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AN EVOLVING MOBILE MARKET
A Latin American mobile CSP is working to differentiate itself by improving its pre-paid and post-paid mobile service quality in a growing and competitive marketplace – thereby ensuring the success of new voice and data services.

NEW DATA MODELS
Ericsson deployed Experience Manager across five different properties, incorporating customized SQM and SLA data models for individual KPI and KQI quality indicators, data source adapters and management dashboards.

GENERATING VALUE
The solution reduced the time taken to identify congestion from weeks to less than one hour, and provided near real-time service quality views and problem isolation for voice, VoIP, SMS and internet applications. It also improved root cause analysis and resolution, and reduced the time taken to prioritize service degradations and generate reports from hours to minutes.

By monitoring traffic patterns, the CSP is now able to manage its capacity more effectively. It has differentiated itself through the monitoring of Service Level Agreement metrics, and is now supporting new revenue streams with the ability to monitor the health of top-up platforms for pre-paid mobile.
150 percent increase in daily total of orders processed
36 percent increase in total number of services offered
Launch time for low-to-medium complexity service reduced to less than a month
Launch time for complex service reduced to under six weeks

CONSOLIDATED SYSTEMS
To help its country lead the region in technology and business by offering an array of next-generation broadband and data services, one Middle Eastern Tier 1 CSP has consolidated its OSS/BSS systems for streamlined operations and increased automation. As a result, hundreds of legacy inventory systems have been migrated to a more centralized, accurate corporate repository.

A STRONG FOUNDATION
The solution was based on a range of consulting and implementation services combined with an Ericsson OSS foundation that utilizes Granite Inventory, Ericsson Network Engineer, Ericsson Workflow Director, Ericsson Customer Number Manager, and COMMON LANGUAGE®.

REDUCED SERVICE LAUNCH TIME
By combining process automation with a more accurate profile of available capacity, service order processing time and fallout have been reduced. New service launch time has also been reduced, leading to an increase in the number of services offered. The solution has automated the production of fiber design documents, including the management of more than 1,300 access points.
MANAGING EFFECTIVE NETWORKS

EFFICIENT PLAN-TO-PROVISION PROCESS HANDLES 1,500 WORK ORDERS AT ANY GIVEN TIME

THE NEED FOR EFFICIENCY
Due to high service penetration and rising demand in the Middle East, this incumbent needed a more efficient end-to-end method for managing its network build process. Easier access to its engineering records was critical for greater efficiency.

SEAMLESS PROCESSING
Ericsson Network Engineer has been used since 1999 for fiber and copper. The tailored solution was also integrated with enterprise resource planning for seamless work order processing. With the engineering solution well-established, the CSP recently added Granite Inventory and Ericsson Integrated Inventory to streamline its rollout of FTTH and to better support its enterprise data services.

INCREASED SATISFACTION
The solution has eliminated more than 5,000 paper drawings, removing the requirement for staff to travel to the centralized engineering office to reference printed plans.

With web-based access, users can qualify prospective customers for MPLS services, and marketing and engineering can immediately determine whether a new service is ready to be launched. This has led to better customer satisfaction, with the network handling additional subscriber load and accurately pinpointing fault locations.
Previously, it was often impossible to reproduce the fault scenarios and impossible to trace.

We are collecting information all of the time, so if they call with an issue we can find the result within minutes.

We particularly like the ability to drill down all the way from network level KPI to subscriber level. We are able to highlight specific control plane signaling abnormalities on any type of handset, especially for smartphones.

We would like to extend usage scope to allow more commercial staff to use the information, for example the customer-care center and marketing.

ENGINEERING MANAGER

ON TOP OF THE PROBLEM

MEETING THE MULTI-VENDOR DATA CHALLENGE WITH ERICSSON NETWORK IQ EVENTS

FACING UP TO THE CHALLENGE
Mobile broadband is bringing mobility to millions. But new technologies bring new challenges, and assuring that customers get the performance they expect is no easy task. Millions of devices and a plethora of new services being rolled out in fast expanding networks have made it more important than ever to be up to the challenge.

One major Asian operator had a problem with its network. It couldn’t get the visibility it needed to be able to identify and track down complex service issues. The scale of the problem was daunting, and network issues were taking too long to resolve.

ADVANCED ANALYSIS
The solution was Ericsson Network IQ Events, integrating the operator’s core network to capture data from multiple sources and make sense of what was happening. Its scalability, usability and advanced analysis features made it the ideal tool to provide the operator with the detailed insight it needed.

SOLVING PROBLEMS QUICKLY
Ericsson Network IQ Events collects control and user plane data so that operators can analyze what’s happening and quickly get to the root of the problem. This means problems can be fixed proactively – before users call in to complain.
A DEPENDABLE EXPERIENCE

TROUBLE-TO-RESOLUTION SOLUTION CUTS MOBILE CUSTOMER CARE COSTS BY 20 PERCENT

› 20 percent reduction in customer care costs
› 10 percent fewer fault tickets
› 15 percent shorter MTTR
› 15 percent outage reduction
› 3 percent less churn
› 20 percent fewer blocked calls
› 2 percent of capital deferred

PREVENTATIVE MEASURES
A leading Asian mobile CSP has recently taken measures to ensure a reliable voice and data experience, and to enhance its enterprise customer offering through more robust SLAs.

PERFORMANCE AND QUALITY
Ericsson Experience Manager is now instrumental in helping the CSP to measure service quality and prioritize service degradations. In preparation for the software deployment, Ericsson experts developed the requisite individual KPIs and composite KQIs that are necessary for service quality analysis and the unification of data sources.

MEASURABLE BENEFITS
Overall, the operation resulted in a significant 20 percent reduction in customer care costs. There were notable gains in service performance, with fewer fault tickets, shorter MTTR and a 15 percent outage reduction. The ability to continually monitor the user experience and take preemptive corrective actions also led to measurable advances in customer response, with fewer blocked calls and less churn.
AN IMMEDIATE NEED

In order to become the preferred service provider in its region, the operator had an immediate need to improve its competitive position by attracting new subscribers while coping with the challenges of network expansion. This called for tight control of opex, keeping day-to-day costs down through standardization, automation, streamlined processes and common tools. Performance management was necessary in order to prepare for the smooth implementation of new services like mobile broadband.

A GRADUAL HANDOVER

In order to reach this objective, the operator implemented a turnkey comprehensive Network Operations Center (NOC) for unified alarm and monitoring, including Fault Management, Trouble Management, Performance Management, Service Level Management, wall display and various operational processes based on ITIL and eTOM.

Ericsson was able to leverage its managed services experience to build and organize the NOC, as well as to train its personnel, so that responsibility could be gradually handed over to the operator. Following the NOC establishment, a Service Assurance program was launched to address issues of churn and service quality.

ENHANCED OFFERINGS

The establishment of one NOC was all that was necessary to facilitate each of the following services:

- Standardized working and operational processes for incident handling and problem resolution
- Centralized and homogenous vision of the end-to-end quality of the services
- Consolidated operational tools for Fault Management, Trouble Ticketing, Workforce Management, Performance Management and SLA Management

As a result, the company was able to focus on enhancing its offerings to consumers, thanks to substantial opex savings and increased service quality.
ENSURING EFFICIENT NETWORK GROWTH AND INCREASING ARPU IN AFRICA

SETTING BENCHMARKS

African operators are facing a rapidly developing market. With mobile internet and MMS services attracting new subscribers every day, ensuring ease of use is essential for customer satisfaction. One African operator chose to use an Over-The-Air (OTA) platform as a way of ensuring that all devices were properly configured for multimedia services – making it easier for subscribers to use value-added services on their mobile phones.

In addition to the continued expansion of its network, the operator also needed to optimize its existing network performance and efficiency, as well as improve the competence of its workforce.

EFFICIENCY IN ALL AREAS

Several aspects made up the final system support solution. Charging and Billing in One, Automatic Device Configuration (ADC) and Systems Integration handled things from a technical perspective, with consulting and learning services provided for the task force.

FUTURE POTENTIAL

The solution has made a significant contribution to network growth, in addition to improving staff skills and knowledge. This configuration now provides service to the entire country, catering for over seven million subscribers using only two servers. The operator is now making plans to upgrade even further, with a total of four servers designed to provide a greater number of services and functionalities to its users.

This increase in capacity will also allow the operator to configure iPhones, Androids and Windows smartphones. The ADC does this automatically, without any need for action from the subscriber. This in turn reduces the burden on the customer call center, thereby reducing opex.

We are happy to partner with Ericsson on this project. Ericsson has the experience, product portfolio and service capabilities to deliver the highest quality network development. This contract includes a program of knowledge transfer, increasing the competence of our staff and ensuring that we are able to maintain and develop our high level end user experience. With this agreement we feel confident that we will continue to stay ahead of our competitors in the region.

– CEO
Billing in Mobile Satellite Services is a complex world, therefore it is imperative that you have a high quality, highly flexible and advanced billing system that integrates so many inputs.”

– CEO
COMPLEX VALUE CHAIN

An international operator which provides satellite communications services to users in 110 countries undertook a complex project to migrate its billing system operations.

The challenges were vast. The value chain involved numerous parties, including national communications service providers, dealers, roaming partners, interconnect partners and local tax authorities. Each was a potential chargeable party for every transaction made using the operator’s service.

Operational efficiency was a must, particularly when it came to significant tariff plan configuration duplication and the accessing of customer data by customer service representatives.

SIGNIFICANT SUPPORT

The operator migrated its charging and billing system operations to Ericsson’s BSCS iX Release 2. The complex value chain involved required 64 instances of Ericsson’s BSCS version 5 billing and customer care software.

A single consolidated database replaced the previous multiple software installation. The new convergent system allows the operator to introduce charging capability for GPRS and data services. It supports cross service bundles, where previously such services could only be made available as separate products. In addition, all services can be covered in a single consolidated bill.

AWARD WINNING

The solution was a success and earned the operator and Ericsson the award for the “Most Effective Customer Facing Project” at the World BSS Awards in Amsterdam, 2009. The award was given due to the improved services and response times achieved.

- Migration of 64 instances of BSCS 5 billing system into one BSCS iX Release 2
- Improved ease of operation of customer-care system for CSRs
- The ability to quickly define new tariff plans, specific to local market needs
- 70 percent of all enquiries completed in first call
A Serbian operator was looking to improve capacity and increase stability in its mediation solution to better cater for its subscribers’ needs.

Based on its strong relationship with Ericsson it decided to be the first to adopt the new version of the company’s Multi Mediation 7.0 solution.

Multi Mediation 7.0 guarantees performance improvement which leads to better control over revenue and subscriber behavior. This in turn gives the operator more control over what happens in its networks. The solution provides excellent total cost of ownership and supports the transformation of the network and business support system.

For an FOA project, the implementation was surprisingly successful and problem-free.

– BILLING MANAGER
MULTI-COUNTRY OPERATOR MIGRATES TO BSCS IX IN EIGHT MONTHS

IMPROVED PROCEDURES
A multi-country operator with over 20 million subscribers needed to speed up its critical records to better meet its users’ needs. The system would fulfill a variety of important functions, such as providing the information required to resolve disputes with partners over charges. Improved procedures were therefore required to help speed up access to these reports.

The operator also wanted to enhance its roaming agreements by making the charging and billing flexibility that its retail customers enjoy available to commercial customers.

GLOBAL SUPPORT
Ericsson sent an onsite support team which facilitated a migration to a customized interconnect solution based on BSCS iX Release 2.

Ericsson’s billing, rating and customer care product BSCS iX has been in use at all four of the customer’s operators. This has helped facilitate the development of internal knowledge of the system.

Ericsson’s client service team integrated the BSCS iX system before handling two other migration projects within the customer group.

The project has seen one of Ericsson’s largest onsite support teams deployed, with 14 engineers deployed across multiple countries.

ECONOMIES OF SCALE
The system was operational within eight months with all milestones met along the way. The customer has benefitted from greater economies of scale as the product’s resources can be shared by all of the company’s sites.

Ericsson has provided additional support to the operator, including billing solutions and expertise. This has enabled the operator to expand quickly into new geographic markets, as well as flourishing in its home market.

In terms of IT and billing, the customer has been able to maximize the capabilities of BSCS by tapping into the expertise of Ericsson’s services network. This has given them a distinct advantage in one of Europe’s most competitive markets.
It was very successful, the company didn’t feel a thing, it just happened. That is the ultimate target of any migration project: do not lose a cent and do not intrude on one minute of your customers’ usage time. We succeeded on both.”

– CIO
COMPETITIVE ADVANTAGE

A European operator had a vision of consolidating its pre-paid services under one common system and establishing a convergence ready solution. This would help it to streamline both its capex and opex expenditure, as well as offering a new range of services including community charging and loyalty schemes.

SEAMLESS MIGRATION

Ericsson implemented a three phase program which delivered:

- Simplified layered architecture with full scalability and redundancy
- Consolidated systems

Ericsson also integrated its Charging System 4 and upgraded the operator’s BSCS ix. Service included network proposition, systems, software, consultancy services and system integration. As the prime integrator, Ericsson managed 14 different companies and vendors, directing more than 200 engineers and systems integrators, and coordinating the whole two year project.

In all, 4 million pre-paid and hybrid customers and 1 million post-paid users were migrated, achieving seamless integration between the Charging System and BSCS ix.

The new system improved the operator’s time-to-market and time-to-revenue. This was achieved through:

- Single-tariff management, unified product catalogue, flexible tariff and simulation tools
- Single-rating engine and real-time balance control

READY FOR NEW OPPORTUNITIES

As a result, the operator achieved lower opex and capex, as well as gaining a future-proof industrialized solution designed to easily support new business requirements, technologies and services.
A European operator wanted to replace its customer management and post-paid rating applications for its GSM operation. This would enable it to focus on a segmented one market strategy instead of a mass market strategy.

Another objective was to consolidate multiple customer management, mediation & provisioning and post-paid rating & billing applications into one solution. This would address all future business needs and enable them to reduce opex.

Ericsson’s approach involved the following:

- Analyzing the operator’s technical processes and introducing a range of process optimization procedures that enabled them to streamline the business
- Reducing the number of external support services which the company used
- Replacing two rating and billing systems with a single solution based on BSCS iX

With a solution that was aligned to their business processes, the operator had the flexibility to define products for each of its target market segments with minimal customization. Furthermore, the systems consolidation and a reduction in the number of interfaces helped the team work more efficiently, lowering costs and speeding-up time-to-market.

This operator now serves as an example of billing operations best practice to sister companies within its group.
SEIZING OPPORTUNITIES

European Community roaming rules stipulate that mobile operators must introduce a data service ‘cut off’ mechanism when the user’s bill reaches EUR 50. Upon the legislation’s introduction, one operator sought to implement systems which would enable it to meet the requirements and use them as an opportunity to launch new services.

Using Ericsson’s Prepaid System with the service creation environment, the legal requirement was met and the new service launched with minimal disruption.

GREATER LOYALTY

The operator’s subscribers can now interact with the service in real time to change their spending thresholds, rather than just having a blanket EUR 50 limit. Home networks are held responsible for any excess charges and so the solution has the added advantage of reducing fraud and cost overruns.

Ericsson’s solution gave the operator precise control over its post-paid data sessions and enabled it to authorize corresponding transactions in real time.

The customer’s subscribers have gained confidence in their service usage due to lack of worry over cost. This in turn has led to higher levels of customer loyalty.
UNIFIED INFRASTRUCTURE
An operator present in over 9 countries and servicing 61 million subscribers required a convergent solution that would enable real-time rating of all post-paid subscribers and unification of pre-paid and post-paid rating infrastructure.

STEADY IMPROVEMENTS
Ericsson's solution was based on Charging System 5.0 for both pre-paid and post-paid subscribers as well as Multi Mediation. Ericsson worked with the operator to develop a step-by-step approach to implementation, enabling systems integration to be conducted with minimal impact on business operations.

FULL CONVERGENCE
Once completed, the upgrade resulted in a fully convergent charging solution that unified post-paid and pre-paid contracts for all types of services. The solution also enables:

- Real-time rating for post-paid subscribers
- Real-time spending control for post-paid segment
- Near real-time bill amount notification
- Real-time offerings
- Real-time communication of free minute usages
- New offerings for the cost-aware post-paid segment
INTRODUCING THE ‘ALWAYS ON’ SERVICE WITH GEO-REDUNDANT CHARGING

THE PLAN B CHALLENGE

Ever since mobile phones became omnipresent, the pre-paid model has been the primary choice in most markets. ‘Always On’ service availability and the ability to charge for services delivered has become a key target for operators.

Geographic redundancy can play a key role in any contingency plan, but the challenge lies in achieving this in a high-availability, high-performance, real-time computing environment.

GEOGRAPHIC INDEPENDENCE

A Tier 1 Latin American operator with 34 million pre-paid subscribers decided to plan ahead by deploying the Ericsson Prepaid System with geographic redundancy in each area. Each of its 28 pre-paid charging nodes were geographically split between two central offices running in a geo-redundant, active-active, load-balancing configuration, with dynamic load-balancing across all services in the cluster. This allowed for the engineering of system utilization to the desired level of redundancy.

Due to the fact that nodes can be in different locations, a 2+2 configuration represents complete geographic redundancy and a sound, reliable disaster plan.

AVERTING CATASTROPHE

On the morning of December 21 2010, a fire started in the battery room of one of the operator’s larger urban central offices. This office supported some eight million pre-paid customers in the surrounding area. Half of the pre-paid charging system supporting these customers was within this particular office, and was no longer capable of communicating with the telecommunications network.

Despite this, all calls were completed due to the active geographic-redundant half of the system, which began to seamlessly manage the calls without interference to customers – saving the operator millions in USD.
Through our long-term partnership with Ericsson, we are already bringing innovative services and best-quality network coverage to our customers across the Caribbean and Central America. We now look forward to delighting mobile users in Panama in the same way.

– GROUP CTO
CONSISTENT CHARGING
A multinational operator needed the ability to manage its charging-related features in a consistent way. It wanted to offer post-paid customers the types of services that have traditionally been restricted to those on pre-paid tariffs.

EDGE CAPABILITY
Ericsson signed a sole-supplier agreement with the customer for the nationwide deployment of a GSM/EDGE network in Panama. It involves the radio access network, Mobile Softswitch Solution, mobile backhaul solution with optical and microwave products, and a Convergent Charging and Billing solution. Ericsson will also be responsible for network deployment, systems integration, and learning services.

The strategic partnership allows the operator to offer innovative mobile services to its subscribers.

BOOSTING UPTAKE
The introduction of EDGE capability allows the operator to cost-effectively increase data capacity in the network and offer high-speed mobile data services over the GSM network. The Convergent Charging and Billing solution empowers the operator to leverage the EDGE investments by providing new ways to introduce and charge for new services and boost the uptake of mobile data services. It improves the customer experience by providing users with real-time information about their balances, bonuses and promotions. Opex is also reduced.
A multinational operator faced the challenge of assessing and addressing upfront operating revenue leakage across 18 Latin American operations. It needed to drive the focused development of a revenue assurance function and capability across all group operations to reduce operational risk. The program needed to take the form of a large but efficient transformation program across all operations to enable reuse and sharing.

**TASK FORCE ACTION**

Ericsson was chosen to be the driver for the overall transformation program. Through a range of consulting and systems integration services, it formed task forces to detect and prevent leakages. Best practices were formed, and the team developed and implemented a revenue assurance control model and capability.

**PROCESS AND PLATFORM TRANSFORMATION**

In combination, these processes optimized the use of the operator’s IT systems. It achieved a significant EBITDA improvement. Revenue controls were increased on both fixed and mobile sides across the Latin American operations, reducing operational risk. Upfront revenue leakage was prevented, and the project formed a starting point for process and platform transformation initiatives across the operation's various functions.

**REVENUE ASSURANCE PROGRAM FRAMEWORK**

- Access
- Strategy and roadmap
- Leakage and analysis
- Assessment
- Analyze
- Capability design
- Recovery and prevention
- Implement
- Capability implementation
QUICKER THAN THE COMPETITION

In fact-paced markets, being first is key. A service provider was determined to stay ahead in India by introducing innovative services more quickly than the competition.

NEW INNOVATIONS

Partnering with an Ericsson on-site service creation team using the Ericsson Prepaid System, it gained the ability to test innovations that were previously not possible or too expensive to introduce. A two-person on-site service creation team was able to handle new product creation, cost-effectively creating more than 30 new products per month.

FAST TURNAROUND

For each circle the operator has the ability to change AoC advertising text every day, with one or more new recharge types each week. New discounts or promotion plans are released several times a month.

Per second billing for the first circle took less than one week, and similar plans in extra circles took less than one day each.

The pre-paid solution is flexible and vendor agnostic, which means that we are able to easily and quickly implement new service offers, which will attract more customers and build our market share. This solution is core to our strategic vision of being a communications pioneer in the delivery of mobile voice and data services in the Indian market.”

– COO
In line with a business objective to become a top ten global operator, a Middle Eastern provider set out to build and maintain a high-value customer base. It wanted to attain this by selling appealing and innovative offerings, as well as achieving operational efficiency to protect its margins.

Ericsson was asked to drive a BSS transformation program. The program involved replacing the legacy BSS environment across all of the operator’s business segments. It also included program management, process consulting and organizational & competence development.

The program resulted in the creation of a high-end user experience, providing the ability to secure customer loyalty and retention. It also offered enhanced capability in innovative offerings, supporting cross-selling and up-selling with quicker time-to-market for new services. In addition, opex was reduced through a modernized and harmonized BSS environment.
NEW, COMPELLING SERVICES
An operator in South East Asia wanted to reposition itself as an innovative integrated service provider and a one stop shop for all communications and entertainments services. As an integrated operator, 30 percent of revenue comes from non-voice services and 54 percent of its households subscribe to two or more services. Its ambition was to offer compelling services across GSM, wireline, TV and cable markets but at the same time consolidate and reduce the costs of maintaining its numerous business support systems.

TRULY CONVERGED
The solution was based on BSCS iX. This enabled the operator to consolidate four billing systems into one. It also allowed the operator to deliver a truly converged invoice, with each customer receiving a single bill for all their services.

NEW POSSIBILITIES
The solution has allowed the operator to launch new services that were not possible before the upgrade. This has generated significant revenue improvements, with both broadband and cable ARPs now twice as high than those from GSM pre-paid services. The business is also more efficient, thanks to the billing systems consolidation.
We want to provide our customers with a differentiated and personalized user experience by providing them choice and control over how much they want to spend, when they want to spend and for which services. A converged billing solution will help us to achieve this customer intimacy.”

COO

EFFICIENCY AND TRANSPARENCY
Subscribers always demand efficient service. To ensure satisfaction, this mobile operator wanted to offer personalized services with streamlined customer care, easy activation and true transparency. To meet these demands, it required an end-to-end, real-time revenue management system for customer management, charging and billing.

INNOVATIVE OFFERING
Ericsson provided a Charging and Billing in One (CBiO) solution. It enables innovative products and services to be swiftly launched and delivered to the operator’s subscriber base.

OPERATOR IN THE SOUTH-EAST ASIA/OCEANIA REGION IMPROVES MARKETING CAPABILITIES AND SECURES REVENUE FLOWS WITH ERICSSON CHARGING AND BILLING IN ONE SOLUTION

TRANSFORMATION DELIVERED
The implementation transformed billing and information structures, resulting in increased operational efficiencies and enhanced transparency for users. It enabled cost-effective launches of new leading-edge services, offering the service provider improved marketing capabilities and more secure revenue flows.
Subscriber growth from 10 million to 40 million during relationship

CONSUMER CONTROL

A South-East Asian operator has drawn on its longstanding partnership with Ericsson to perform an extensive upgrade of Ericsson’s Charging System. The upgrade enables the company to respond faster to market conditions and user demands.

The operator needed to launch a new post-paid package that provided customers with more control over their spending, creating a need for a convergent real-time charging capability.

Tailored Upgrade

The modernization project managed by Ericsson involved upgrading Ericsson’s Charging System from release 3.0 to 5.0, upgrading Multi Mediation and Multi Activation to the latest release, customizations and adaptations across existing Business Support Systems and Service Layer Nodes from different vendors, and the realization of new business requirements using the new solution.

Seamless Evolution

This huge project was completed with zero effect on normal operation. It has enabled the operator to facilitate the continuous launch of new services, backed up by flexible charging and billing facilities.

Ericsson has performed this complex project above my expectations without impacting on end users and revenue.”

– CIO
KEEPING THE COMPETITIVE EDGE
A leading African mobile operator needed to enhance its charging and billing system to allow it to retain a competitive edge in the market. It wanted to provide its subscribers with flexible tariffs and full control of costs, as well as added bonuses and rewards.

SEAMLESS SERVICES
Ericsson engaged with the operator as its systems integration partner, providing all of the required products and services needed for the smooth introduction of the Convergent Charging and Billing solution, and enabling seamless services across all user segments.

ALL TOGETHER NOW
AFRICAN OPERATOR DIFFERENTIATES FROM THE COMPETITION WITH A CONVERGENT CHARGING AND BILLING SOLUTION

BETTER FOR EVERYONE
For the operator, the project has created a single revenue management solution for all subscribers and all services, including key features discount and promotion handling, real-time rating, segmentation, pricing and promotions.

For users, it means one point of contact and a single invoice for all their services, as well as real-time information on spending, bundles, bonuses and rewards. This means more control, more transparency – and ultimately, greater satisfaction.
ENCOURAGING NEW BEHAVIOR
Network congestion at peak times of day can damage revenue and frustrate customers. A multinational operator wanted to increase its network utilization by encouraging users to spread usage during the day, alongside increasing tenure, call count and call duration.

AFRICAN OPERATOR QUICKLY GAINS 4.5 MILLION SUBSCRIBERS WITH THE FIRST EVER YIELD OPTIMIZATION OFFERING

> 4.5 million subscribers signed up within 10 months
> Contributes 55 percent of customer’s pre-paid revenue

YIELD MANAGEMENT
The customer launched its offering based on Ericsson’s Yield Management Solution. Ericsson worked in close partnership with the operator to secure the launch and capability to cater for a rapid subscriber uptake. The engagement included the end-to-end provisioning of the Yield Management solution, including systems integration, software and hardware.

MULTINATIONAL ROLLOUT
The operator has successfully increased its call duration and call count, and in turn has boosted both revenue and subscriber numbers. The service has now been rolled out over 12 of the operator’s 21 markets.
An African operator wanted to be the first in the region to launch Multimedia Telephony (MMTel) based on IMS. Together with Ericsson, it designed a project to allow consumers and business users to access rich chat, presence and video communication services across mobile and fixed networks.

Ericsson implemented both its world-leading real-time Charging System and its IMS-based MMTel solution. It transformed the operator’s assets into a converged IP-based network, migrating all its subscribers to a common IP-based service platform.

The combination of technology makes advanced, high-quality voice and multimedia services available to all its subscribers. For those on pre-paid packages, this means accessing these services for the first time. The services are available on all access types, including the mobile network, public Wi-Fi and fixed broadband, and can even be accessed from abroad.

With Ericsson’s support, we have succeeded in achieving a pre-paid solution for multimedia services using the same account as for voice. With the very same scratch card, you can now load airtime and use it for voice and data wherever you are.”

– COO
A SINGLE SYSTEM
An operator on the African continent required a common charging and billing platform for all its services, bringing together its separate pre-paid and post-paid platforms for different services into one single system.

SEAMLESS SERVICES
Ericsson provided a Convergent Charging and Billing solution; a single solution for all subscribers and services. The solution hosts features including discount and promotion handling, real-time rating, segmentation, pricing, promotions, seamless support for pre-paid and post-paid, and one bill for all services delivered including wireline telephony, mobile services and internet access.

EFFICIENT AND TRANSPARENT
By offering seamless services across all subscriber segments, the operator has seen increased efficiency. The user experience is transformed, with greater transparency and more control over spending. Each user also has access to the operator’s entire range of services and products.

Subscribers get a single bill for all their services, and payment methods can be customized, even drawing on a combination of pre-pay and post-pay for a single user.

AFRICAN OPERATOR TRANSFORMS THE CUSTOMER EXPERIENCE WITH CONVERGENT CHARGING AND BILLING PLATFORM

UNITY AND SIMPLICITY

Ericsson’s solid position as a provider of revenue management solutions in the local and international markets enabled a strategic, well-managed implementation, with quick implementation time and low risk, which is currently being rolled out.”

– CTIO
MEETING MARKET DEMAND
An operator in Africa needed to meet market demand for a fully convergent service offering. It asked Ericsson to help it to meet that challenge, enabling it to launch a fixed pre-paid and post-paid convergent system, as well as enhancing the backbone of its network to facilitate new services.

NEW POSSIBILITIES
Ericsson provided the customer with a Convergent Charging Solution. At the same time a national fiber backbone was implemented, connecting all the major cities. Wireless broadband access networks were also rolled out, enabling converged voice, data and entertainment services.

AFFORDABLE ACCESS
The solution allows the provider to continuously expand its services as well as improving its current offer, resulting in increased revenues. The enhanced network ended the country’s dependency on satellites for international connections. This reduced the cost of international bandwidth, making internet access more affordable to a larger part of the population.

AFRICAN OPERATOR REVOLUTIONIZES ITS ASSETS, MAKING ADVANCED SERVICES AVAILABLE TO ALL

With the successful implementation of this project, Ericsson has proven that it is a partner in which we can have confidence in full delivery. With faster time to revenue and organizational effectiveness provided by Ericsson’s Charging System, we are able to continue to deliver innovative and precise customer propositions.”

– CEO
New Business Models
An operator in a high-penetration European market needed new business models to win share. It elected to launch a joint venture MVNO which would avoid any interruption or resource burden on day-to-day operations. They also requested that the solution be capable of hosting additional MVNOs, while only having a single point of impact on the network.

Pre-Paid and Post-Paid
Ericsson delivered a complete MVNO solution for both pre-paid and post-paid business. The solution included Ericsson's Charging System, BSCS iX Billing System, Multi Activation and Multi Mediation.

Seamless Connection
The system was able to seamlessly connect with the network without any disruption to day-to-day operations. Thanks to multi-MVNO support, the operator is now able to quickly launch additional MVNOs using the same system, with minimal additional cost.
COST IS KEY

With today’s need for efficiency being greater than ever, a global operator wanted to drive down opex. At the same time, it saw a need to outsource parts of its OSS/BSS operations to increase its focus on core activities and development of new markets.

SEVEN-YEAR CONTRACT

Under a seven-year contract, Ericsson took responsibility for the transformation and maintenance of a number of OSS/BSS applications. The ongoing activity involves more than 600 people, and includes:

- Design, development, integration and support activities
- Online Charging Solution
- OSS and subscriber service applications

EFFICIENT CONSOLIDATION

The project involved various consolidation and centralization activities. This included centralizing demand management, consolidating software versions across operating units and adopting common support processes and tools. In combination, these measures successfully resulted in reducing opex.

SUPER STREAMLINED

GLOBAL OPERATOR DRIVES EFFICIENT OPERATIONS WITH TRANSFORMATION PROJECT AND OUTSOURCED APPLICATION DEVELOPMENT & MAINTENANCE

- 7-year contract
- Significant opex reduction
- Real-time rating solution
- 3 OSS applications
- Services and platforms:
  - Internet VAS
  - Corporate Communications
  - Localization Services

- 600 service professionals involved
As a new entrant on a competitive market, the operator made high demands in its selection process for prime integrator and supplier of a fully convergent charging and billing solution. They wanted a partner with the ability to fully understand their business needs, provide an end-to-end solution and give them quick time-to-market.

**UNIqe SOlUTION**

Ericsson was chosen to be the prime integrator and implemented a fully convergent charging and billing solution. The solution included BSCS iX, Charging System, Multi Activation and Multi Mediation. The solution successfully separates payment methods and tariffs.

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**SWIFT AND SUCCESSFUL**

**AFRICAN OPERATOR SWIFTLY IMPLEMENTS A CONVERGENT REAL-TIME CHARGING AND BILLING SOLUTION**

**PRIME INTEGRATOR**

As a new entrant on a competitive market, the operator made high demands in its selection process for prime integrator and supplier of a fully convergent charging and billing solution. They wanted a partner with the ability to fully understand their business needs, provide an end-to-end solution and give them quick time-to-market.

**PIONEERING PROJECT**

This innovation positioned the operator at the global forefront of revenue management. Having one common environment has optimized efficiency and helped to manage risk, as well as resulting in rapid market uptake of the operator’s services. New market opportunities have opened up, and customer satisfaction is high.

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Ericsson has been a prime pillar for us to go to market in such a short time. We are happy to enjoy the new technologies that Ericsson is bringing to the table and to take these technologies to our customers.”

– CCO
LEADING NORTH AFRICAN OPERATOR MODERNIZES ITS CHARGING SYSTEM

WILLINGNESS TO SPEND
A leading North African operator faced a challenge – its pre-paid users would often limit their spending because they couldn’t see their current balance. When they can, they become more willing to spend on services such as data and messaging, as well as becoming more satisfied with their operators. With this in mind, the operator set out to modernize its charging system which serves over 24 million subscribers.

BOOSTING SPENDING AND SATISFACTION
The solution encourages customers to increase their spending as well as boosting their satisfaction. For the operator, it improves marketing capabilities by enabling customer segmentation, as well as reducing opex.

INSTANT ACCESS
Ericsson was selected to replace the old prepaid system and provide a convergent real-time charging solution, migrating the existing subscribers. The solution included Ericsson Charging System and BSCS iX. The new solution controls any type of transaction and offers both the user and the operator access to the current balance in real-time.