BUILDING, OPTIMIZING AND SUPPORTING NETWORKS

A Networked Society can offer a world of opportunities for operators. New connections mean new business – but also new challenges. With people interacting, innovating and sharing like never before, operators must run ever more complex networks without compromising on quality, user experience or a healthy bottom line.

Operators face the challenge of remaining profitable in a rapidly changing communications landscape. Mobile broadband is growing at a rapid rate, thanks largely to the explosion in smartphone usage, and end users expect increasingly sophisticated and flexible services at affordable prices.

Ericsson’s technology and services leadership, market understanding and network experience make it the ideal partner to help operators meet this challenge. From deployment through support to optimization, Ericsson Product Related Services help operators to improve user experience, become more operationally efficient, and evolve their networks to meet the user demands of the future.

HELPING AT EVERY STEP

Ericsson can support operators whether they are looking to expand, upgrade, restructure or migrate networks.

To handle increasing user demands and capitalize on traffic growth, operators require networks that are up to date. Ericsson’s radio access network modernization solutions provide all of the services needed to enable safe and cost-efficient evolution.

Ericsson also has unparalleled experience in deploying and integrating complex, multi-technology, end-to-end networks, ranging from 2G through to the latest LTE technology. Ericsson’s network build and integration services can deliver risk-proof and reliable rollout, freeing up operators to focus on their business objectives.

Finally, since more than half of all mobile traffic is generated indoors, Ericsson offers a full range of products and services designed to ensure superior indoor network performance.

SUPPORT AROUND THE CLOCK

Through a combination of technology and service leadership, and a unique mix of global and local expertise, Ericsson Support Services enable operators to exceed end users’ expectations while maintaining efficient network operations.
This support promise is complemented by three value-added service packages – Assure, Optimize and Extend – that respond to different life cycle needs.

Proactive Support services enable operators to keep network disturbances to a minimum through optimal operational prioritization and effective fault prevention. A stable network keeps end users happy, which in turn has a positive impact on brand loyalty.

Operators can also significantly reduce the expenses associated with maintaining spare-part stocks in a multitude of locations by benefiting from Ericsson’s global economies of scale in spare-parts pooling, planning, dimensioning and distribution.

GETTING THE MOST FROM INVESTMENTS

Ericsson can help operators to cost-efficiently get the most from their existing networks as they meet the ever-increasing demands of the Networked Society.

Our highly skilled personnel can provide operators with detailed audits and analyses of network performance, identifying where improvements can be made. Ericsson’s emphasis is on network performance, quality and efficient use of network resources in order to ensure the best possible return on investment.

Ericsson also provides consulting services and offerings to help operators reduce network energy-related opex and get the maximum performance out of their networks at the lowest possible cost.

And as the explosion in smartphone usage pushes more data traffic through networks primarily focused on voice services, Ericsson’s Smartphone Network Optimization offering can help operators to optimize their networks to meet the new traffic models and ensure quality of service for end users.

At large events, network capacity is often stretched to the limit – and yet operators are expected to provide seamless connectivity to a large number of people using a multitude of devices.

APP EXPERIENCE OPTIMIZATION

Operators are well aware that the single most important driver of customer loyalty is network performance, which is why they put a lot of effort into optimizing their networks. As consumers are spending more and more of their time using apps – see, for example, Performance shapes smartphone behavior, a 2014 Ericsson ConsumerLab study – operators are finding they need to optimize their networks in new ways to remain competitive. Conventional network-related key performance indicators (KPIs) alone may no longer paint an accurate picture of the true user experience.

App Experience Optimization is a service launched at Mobile World Congress 2015 that transforms how operators optimize their networks to meet the new demands created by a
fast-evolving app ecosystem. The service addresses this challenge by providing a true picture of the local app experience and correlating this with network-related KPIs, which can then be acted upon. Ericsson Network Design and Optimization experts then optimize for app experience, drawing upon global experience, tools and methods.

In a project announced in February 2016, Ericsson, Tencent and SmarTone are collaborating to optimize the Hong Kong operator’s mobile network for performance of WeChat, a social networking app developed by Tencent with 650 million monthly active users worldwide. For this engagement, App Experience Optimization has been enhanced with the ability to generate a real-time “app coverage map”. This map provides a visual representation of the quality of experience enjoyed by WeChat users.

WeChat is one of the world’s most popular messaging apps. In addition to text and voice messaging, WeChat supports functionality such as multimedia messaging, sharing of GPS location, public accounts that can be used by organizations to communicate with their customers, payments and money transfers, and e-government services.

Ericsson Network Design and Optimization experts are working with SmarTone and Tencent to collect WeChat service KPIs based on anonymized usage performance and location from real subscribers, and correlated them with network KPIs. The results are used to create an app coverage map and to identify optimization opportunities in the WeChat app, its
supporting servers and in SmarTone’s network. The app coverage map depicts the app experience using simple green/yellow/red color coding, with green indicating good app experience and red indicating poor app experience. Engineers can use the app coverage map to visualize performance bottlenecks and as a benchmark when optimizing the app or the network.

In a project conducted during 2014, Ericsson optimized XL Axiata’s network for performance of the Facebook app – making substantial, targeted improvements to XL Axiata’s network. As a result, app experience – defined by the ability to complete transactions within a maximum time of three seconds – improved by between 20 and 70 percent. Time to content improved by up to 70 percent, while upload time improved by up to 50 percent. These results show that it is possible to optimize app experience using existing network resources.

In this video, Staffan Pehrson, Vice President of Network Rollout, Support & Optimization at Ericsson, talks about App Experience Optimization:

For more information, read the press release.

KEY EVENT EXPERIENCE

The growing availability of smart mobile devices and mobile broadband has raised user expectations with regard to network quality. Expectations are even higher during major events, when large numbers of users wish to share their experiences via smart mobile devices. When many users gather in a defined area and share videos, pictures and tweets, network capacity is often stretched to the limit. To help operators cope with sudden increases in network traffic, Ericsson launched its Key Event Experience offering in 2013. This is a complete, robust solution that provides operators with key competence in planning, design, deployment, optimization and proactive fault management.

Key Event Experience was really put to the test during the 2014 World Cup that took place in Brazil in June and July. Mobile networks were stretched to the limit during the event, when 64 matches took place across 12 cities, attracting an average crowd of more than 50,000 people. Data traffic during the event amounted to a whopping 26.7 terabytes – including 1.5 terabytes during the final match alone – but Ericsson’s Key Event Experience ensured that end users were able to enjoy a consistently good experience.
Watch a video about Key Event Experience [here](#).

**QUICK FACTS**

- Product related services such as network rollout, support, and education have been cornerstones of Ericsson's portfolio since we were founded in 1876.
- Over the past two decades, Ericsson has completed turnkey network deployments for 275 customers in 180 countries.
- Today, Ericsson provides 24/7 support for networks with more than 2.5 billion subscribers.
- Ericsson is the world leader in 3G network design and technology consulting, with more than 300 completed projects in 3G radio network tuning, optimization and design, as well as network strategy and security consulting.
- Ericsson has completed more than 1,100 multivendor interface integrations for more than 190 operators worldwide in the past 15 years.
• Each year, Ericsson manages more than 1,500 major projects for network build, expansion or migration for all major standards of mobile and fixed networks worldwide. On average, 100 of these are large, complex turnkey projects.

• Ericsson handles spare-part assets and logistics for more than 250 spare parts management service (SPMS) customers worldwide, in more than 80 countries.

• Ericsson has delivered more than 40 Proactive Support contracts.

• In the fourth quarter of 2010, Ericsson acquired Optimi, a US/Spanish vendor providing products and services for network optimization and management.

• 282,000 solutions to customer cases have been shared using the Knowledge Sharing tool.

• Ericsson’s 66,000 services professionals work in 180 countries (approximately 25,000 of whom are based in our Global Service Centers) and speak more than 100 languages. Ericsson manages networks that serve more than 1 billion subscribers worldwide.

MILESTONES

2016

Ericsson transforms mobile broadband experience for tournament fans in France
Airtel Nigeria and Ericsson pursue broadband for everyone
Ericsson and MTN bring LTE experience to subscribers in Ghana
Ericsson and Entel partner in responsible e-waste disposal and recycling in Chile
Ericsson chosen by Airtel Zambia for network transformation
Ericsson selected by TrueMove H for LTE-Advanced rollout in Thailand
Ericsson transforms network capabilities for Telenor Asia
Ericsson and Cisco partner to create next-generation network for 3 Italia
Telefonica selects Ericsson for global UNICA program
Ericsson, Tencent and SmarTone optimize Hong Kong network for WeChat performance
Singtel and Ericsson raise the bar for the best 4G LTE coverage in Singapore
Ericsson showcases 5G, Internet of Things and cloud Innovation at MWC 2016
Ericsson selected by Idea Cellular for 4G rollout and network transformation

Robi Axiata in Bangladesh to upgrade 2G and expand 3G networks with Ericsson

2015:

Ericsson and Swisscom intensify strategic partnership

Ooredoo Group inks 5-year frame agreement with Ericsson for radio, core and transmission

Ericsson, Telstra and Ciena win Fixed Network Innovation award

Ericsson and Cisco partner to create the networks of the future

Ericsson to transform Telkomsel's Indonesian mobile network

Ericsson and Indosat partner for 4G/LTE network transformation in Indonesia

Ericsson enhances Preemptive Services with big data analytics

Ericsson joins forces with world leaders in underground equipment for fiber deployments

XL Axiata selects Ericsson for 4G/LTE deployment in Indonesia

Cable & Wireless Communications and Ericsson deliver world-class mobile broadband to the Caribbean and Latin America

Bharti Airtel selects Ericsson to roll out 4G in Delhi

Bharti Airtel selects Ericsson to expand 3G network in India

Síminn and Ericsson extend their strategic partnership, enhancing LTE services in Iceland

China Telecom deploys first LTE Ericsson Radio Dot System in China

Ericsson continues to support China Mobile with LTE TDD innovations and rollout

MTS rolls out Russia's first Ericsson Radio Dot System

Airtel and Ericsson extend partnership with LTE deployment in Gabon

nbn and Ericsson partnership delivers world leading broadband service for Australians

Ericsson to support Chunghwa Telecom's LTE expansion
Asiacell reaps rewards of Ericsson network improvement program in Iraq
Far EasTone makes Ericsson its sole 4G/LTE supplier in Taiwan
Safaricom selects Ericsson for network upgrade
EY and Ericsson study maps successful mobile operator strategies
Ericsson again a leader in LTE network infrastructure Magic Quadrant
Idea Cellular selects Ericsson to roll out 3G services in Delhi
Telstra deploys Ericsson LTE broadcast to enable video-centric applications
App Experience Optimization enables operators to see networks as end users do
Ericsson and Entel Chile renew strategic partnership until 2018
Mobile data traffic dominated by top five apps: Ericsson Mobility Report
License Assisted Access live in Ericsson Labs for Verizon, SK Telecom and T-Mobile
App Experience Optimization enables operators to see networks as end users do
MTN and Ericsson partner to drive e-waste disposal and recycling in Benin

2014:
Ethiopia Telecom to invest with Ericsson to transform its network in Ethiopia
Ericsson and Mobinil expand partnership to enhance network capabilities
Airtel deploys 4G/LTE network in Seychelles with Ericsson
Ericsson and Econet Wireless Zimbabwe sign five-year deal to enable faster, more reliable connectivity
dtac selects Ericsson's world-class LTE technology to deliver 4G in major cities
Ericsson signs five-year framework agreement for radio with Telenor
Ericsson’s LTE-Advanced helps T-Mobile continue to expand LTE Network coverage and capacity
TIM Brazil network boosted by Key Event Experience during 2014 World Cup

Ericsson chosen as sole supplier of Claro’s LTE network in Costa Rica

Ericsson prepared Telefónica network for the 2014 World Cup in Brazil

Ericsson ranked first in Communications Service Provider Operational Technology Market Share

Ericsson enables Taiwan's Far EasTone to launch world's first commercial LTE service on APT700 band

SingTel unveils first live LTE-A 300 Mbps service in Singapore

Verizon and Ericsson take pole position at Indy 500 with LTE Multicast

SingTel and Ericsson unveil world’s first nationwide full featured voice over LTE

Bouygues Telecom chooses Voice over LTE from Ericsson for its 4G network in France

Ericsson maintains leadership in the Magic Quadrant for LTE Infrastructure 2014

LIME and Ericsson complete LTE roll-out in Cayman Islands

Ericsson and Telstra achieve world’s first 450Mbps in commercial LTE-A network demonstration

First live LTE broadcast trial in the Netherlands

Ericsson to launch North Africa’s first LTE and VoLTE network for Algérie Telecom

Ericsson chosen as major LTE supplier by Taiwan’s Far EasTone

Thai operator dtac launches LTE with Ericsson

Finnish operator DNA chooses Ericsson for 4G expansion

Ericsson named a network supplier and managed services provider for Telenor in Myanmar

Smile Communications launches 4G/LTE network in Lagos, Nigeria

Vodafone’s Project Spring awards Ericsson with 5 year deal

Real Future launches LTE with Ericsson in Thailand’s cities

Ericsson wins telecoms.com 2014 industry award for connecting the unconnected
Etisalat group and Ericsson collaborate to power the Networked Society initiatives

Ericsson demos bring future to Mobile World Congress 2014

WIND Hellas and Ericsson complete Mobile Packet Core network evolution

2013:

Ericsson strengthens capabilities to meet demand in Network Design and Optimization

Japan's KDDI selects Ericsson for LTE

Ericsson wins Chunghwa Telecom's LTE tender as main supplier

Slovak Telekom launches nationwide 4G/LTE network with Ericsson

Ericsson continues strategic partnership with China Mobile for LTE

Zain transforms its network in Bahrain with Ericsson's latest LTE technology

Batelco selects Ericsson for advanced LTE services

Telefónica to launch 4G/LTE network in Spain

Tele2 Norway selects Ericsson for nationwide 4G rollout

Russia's leading operator MTS selects Ericsson for LTE networks development

Ericsson transforms Orange France network to 4G

Wataniya Telecom network upgrade to boost subscriber services

Ericsson to transform MetroPCS 4G LTE core network

2012:

First Ericsson LTE network built in Africa

Oi establishes 4G/LTE network in Brazil

Telefónica | Vivo chooses Ericsson as supplier for 4G/LTE network in Brazil

Ericsson a partner for SingTel's 4G/LTE and network transformation

SmarTone makes Ericsson its sole 4G LTE vendor in Hong Kong
Telekom Austria Group selects Ericsson for its multi-standard radio network and LTE

Polkomtel and Aero2 select Ericsson to expand 4G/LTE coverage in Poland

Vodafone Egypt selects Ericsson to bring the latest technology to its radio network

China Mobile Hong Kong selects Ericsson to build TD-LTE network

Extreme Project: Ericsson upgrades Russian operator MTS’s network to the latest 3G technology in 14 months

Ericsson selected by T-Mobile USA for LTE and network transformation

Ericsson works with regional wireless operators to bring benefits of LTE to rural America

Ericsson strengthens LTE partnership with SK Telecom

SOFTBANK MOBILE signs LTE contract with Ericsson in Japan

Bouygues Telecom selects Ericsson for trio of technologies

Japan’s eAccess to launch LTE network and expand partnership with Ericsson
NOTES TO EDITORS

Download high-resolution photos and broadcast-quality video at www.ericsson.com/press

Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, business and society to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With approximately 115,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world’s mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.

Founded in 1876, Ericsson has its headquarters in Stockholm, Sweden. Net sales in 2014 were SEK 228.0 billion (USD 33.1 billion). Ericsson is listed on NASDAQ OMX stock exchange in Stockholm and the NASDAQ in New York.

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