De-Risking Digital Transformation
Giving Communication Service Providers carrier-grade reliability for Digital BSS

To help customers take advantage of new digital business opportunities without risking the stability of their Business Support Systems (BSS), Ericsson chose VMware as a verified option for its virtualized, carrier-grade and system-verified BSS deployments. Customers that choose the VMware-based option improve their end-to-end stability while reducing TCO and improving time to market for new digital revenue streams.

Business Support Systems are the lifeblood of any telecommunications business, capturing network events, rating them, and monetizing them by charging customers. Approximately 350 telecom operators choose Ericsson for one or more BSS applications, including billing, charging, mediation, and order management, in large part due to Ericsson’s extensive industry experience and competitive, modular pricing. Approximately 40% of the world’s mobile traffic is carried through Ericsson’s networks, and immense business critical revenue streams flow through its BSS services every month.

Traditionally, CSPs have used sprawling, physical data center infrastructures to support BSS, usually designed with enough redundancy to support high-availability service levels, fulfilling the needs of carrier-grade reliability. Once these systems are in place, operators are understandably reluctant to change due to the high cost of downtime for BSS. As a result, they have been slow to adopt more modern solutions such as server, storage, and network virtualization that are now commonplace in other industries.

In today’s changing competitive landscape, however, CSPs can no longer afford to put off modernization. Legacy solutions are coming off of support, and in an increasingly commoditized industry, new digital revenue opportunities demand greater agility and faster time to market. A way forward to address these topics is to virtualize the supporting infrastructure for BSS to enable operators to deploy new systems instantly, not in months or years. All CSPs are facing or going through this transformation, and Ericsson is steering its customers toward VMware as a virtualization option for Digital BSS.

System verified deployments on VMware
Ericsson works with its customers to verify that their infrastructure is sufficient to support carrier-grade reliability for BSS. As more customers expand their digital services, Ericsson proposes use of VMware vSphere as one option for its proven reliability, deployment resiliency, zero-downtime migrations, and infrastructure orchestration capabilities.

Most customers want us to support their Digital BSS deployments, and one way we’ll do that is if they choose VMware. VMware solutions are proven, mature, and offer carrier-grade reliability."

—JASON KEANE, HEAD OF DIGITAL BSS, ERICSSON

ERICSSON BSS DEPLOYMENTS ON VMWARE

70+
Ericsson BSS customers running on VMware

VMWARE SOLUTIONS
• VMware vSphere®
• VMware vCenter®

TIER 2 TELCO TRANSFORMS BSS
When a Tier 2 CSP wanted to launch new digital offerings and monetize digital services, it turned to Ericsson Digital BSS on VMware. The transformation was wildly successful, achieving the following benefits:
• Up to 3x faster time to market for new products (3 months versus up to 9 months)
• 90% reduction in application footprint
• 80% reduction in server configurations

“Most customers want us to support their Digital BSS deployments, and one way we’ll do that is if they choose VMware. VMware solutions are proven, mature, and offer carrier-grade reliability.”

—JASON KEANE, HEAD OF DIGITAL BSS, ERICSSON
De-Risking Digital Transformation: Giving Communication Service Providers carrier-grade reliability for Digital BSS

BUSINESS IMPACT

• Offer carrier-grade reliability for BSS in a virtualized solution
• Increased agility - Enable rapid deployment of new services and flexibility to respond to changes in application demand or hardware maintenance
• Reduce total cost of ownership (TCO)
• Simplify infrastructure orchestration

Ericsson also uses performance tuning in vSphere to improve performance for guest operating systems and disk I/O, giving customers additional benefits.

![Diagram of Ericsson Digital Experience Platform](image)

FIGURE 1: Ericsson Digital BSS on VMware vSphere

Deploying a virtualized stack for BSS also substantially reduces a telco’s TCO, allowing Ericsson’s customers to scale to take advantage of new digital opportunities while making fewer investments in physical hardware. With the flexibility that virtualization provides, they can standardize configurations, reduce application bloat, and consolidate systems to simplify ongoing management.

Creating new revenue opportunities

5G is coming, bringing with it a new world of revenue opportunities for CSPs. Offering more connections and greater bandwidth than traditional wireless technologies, 5G goes hand-in-hand with the Internet of Things (IoT) and a host of new services that operators could offer. That’s great for innovation and revenue, but it also means that BSS will need to manage, monetize, and record billions of new connected devices. A smart way for CSPs to achieve that rapid scale is to embrace virtualization.

All of this is unfolding in a competitive landscape that is moving faster than ever. If CSPs wait the usual six to nine months to deploy BSS to support a new product, the market opportunity will likely be seized by a more agile competitor.

Customers want their services available now—not in an hour—and they often want to provision it themselves. Again, virtualization is a smart way to deploy new BSS systems quickly enough to develop, test, and launch new services to drive critical revenue and support user-driven service provisioning.

For more information, please visit telco.vmware.com.