

# UPGRADING VALUE

Bharti, India, upgrades its mobile packet backbone to meet rising subscriber demand

## Highlights

### Customer Objective

- To meet fast-growing end-user demand for reliable value-added services

### Ericsson Solution

- Mobile Packet Backbone Network (M-PBN)

### Customer Benefits

- Improved performance of value-added services
- Stable, reliable data network able to meet growing demand
- Seamlessly interconnected WCDMA and GSM systems
- Enables standards-based migration to all-IP

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To meet increased demand for value-added services, Bharti, India, required an Ericsson Mobile Packet Backbone Network (M-PBN).

Bharti Cellular operates throughout India using the Airtel brand. The operator is the leading GSM provider in the country with over 13 million subscribers, a 26 percent market share. End-user numbers and network traffic have both grown by 100 percent year-on-year. The Airtel Live portal, run using EDGE technology, now has more than 1 million active GPRS users.

Bharti quickly realized that there was a need to upgrade the IP infrastructure side of its network in order to maintain quality as the demand for value-added services was expected to continue rising. Bharti had an existing Ericsson GPRS system in 15 of its 23 provincial networks, spanning all of India, which the operator had managed itself since its launch in 2001. To expand these capabilities to meet predicted growth demands, Bharti agreed a Managed Services solution with Ericsson centered on developing a Mobile Packet Backbone Network (M-PBN).

The Managed Service and managed capacity framework allows Bharti, in cooperation with Ericsson, to plan, monitor, operate, expand, design and improve capacity. This solution supports both WCDMA and GSM, enabling seamless access across both networks via a common backbone and an efficient evolution path to all-IP. Ericsson designs high-quality customized internet protocol infrastructure to cater for projected network traffic.

Initially, the solution saw two primary M-PBN sites installed during late 2004, in Delhi and in Bangalore. Performance management capabilities were established to reduce subscriber concerns. Bhargab Mitra, Vice President for Sales Support and Technical Solution, Ericsson, describes the advantages of M-PBN: "The major challenge faced with Bharti's system is competence development to bring stable and reliable service to the network. M-PBN achieved this because Ericsson used its reference design to call on its global service delivery organization to achieve the operator's objectives."

Shankar Halder,  
CTO of North Region,  
Bharti Cellular



“Bharti is very satisfied with the overall performance of the GPRS core network and the expert support provided by Ericsson.”



Taj Mahal, India

Replacement of Bharti's legacy GPRS backbone with the M-PBN solution followed a network design audit and full assessment of Bharti's data network by Ericsson. Radio network tuning for Bharti's recently deployed EDGE network also took place. All services were migrated to M-PBN without any negative impact and the network performance has improved significantly with service issues amongst end-users reduced dramatically.

Shankar Halder, CTO of North Region, Bharti Cellular, outlines how the solution enhanced the service the operator offers to subscribers: "The enhanced design and smooth deployment by core engineers were the key factors of this success. Bharti is very satisfied with the overall performance of the GPRS core network and the expert support provided by Ericsson.

"The deployment of EDGE in the Bharti network delivered superior subscriber experience through the robust and scalable M-PBN solution, introduced by Ericsson in the GPRS core backbone network."