



PrePaid System (PPS 3.5)

First Taste of PrePaid/Postpaid Convergence

The advantage of PrePaid

The PrePaid System (PPS) from Ericsson provides any potential subscriber instant access to personalized mobile phone services with a high degree of integrity and total spending control. PPS is a high capacity IN-based solution suitable for GSM and 3G networks. It works in realtime, which means that credit control is performed before the call is set up. Charging is done so that it does not allow calls to go beyond the account limit. It is today the market leading system, with such advanced functionalities as Family & Friends, WAP, the first generation of PrePaid GPRS, realtime content charging and realtime charging of SMS and MMS as well as roaming based on CAMEL or USSD callback. PPS allows a prepaid subscriber to enjoy all GSM and 3G services without having to sign a contract.

What is new in PrePaid System 3.5?

PPS 3.5 is the first step towards the next generation charging systems that can handle both PrePaid and post-paid subscribers in realtime. In this release the operator can allow subscribers to exceed the zero limit. With the introduction of negative balance and balance dependant tariffs, the operator can allow credit to friendly users and charge at a rate dependent on the balance of the account. Negative Balance allows you to have realtime credit control also for post-paid customers and give the user all the benefits of realtime spending power.

PPS 3.5 also contains a number of enhancements, which significantly have improved system performance and capacity. The improved performance lowers cost of ownership and increases stability of the PPS system. The increased capacity provides the possibility to more cost-effectively grow with growth in traffic in the current network, as well as adding traffic in the form of packet switched data and Mobile Internet based services, without having to add physical nodes.

Strengthen customer loyalty and increase revenues with Negative Balance

A key function in the next generation charging and billing systems is to control credit for all types of subscribers, both PrePaid and Postpaid subscribers, when delivering Mobile Internet services. PPS 3.5 is the first step towards PrePaid/Postpaid convergence.

Increase revenues and improve customer loyalty with Balance Dependent Tariffs

Many operators are looking for different ways to increase the overall usage of the prepaid service. Offering lower tariffs when the balance is high will stimulate recharging. Lower tariffs for low balance on the account stimulates usage and generate quick turnaround times on the account. This feature also complements Negative Balance, as a different tariff can be applied when the subscriber is on credit.

New revenue streams from PrePaid through fixed or monthly fees with the feature Periodic Service Fee Deduction

For many operators a key challenge is to increase revenues from the PrePaid segment. One of the main strategies to accomplish this is to offer new revenue generating services. With Periodic Service Fee Deduction an operator can have monthly subscription fees connected to specific premium services or subscription fees for high volume users to access a lower tariff.

Some of the additional feature functionality in the PPS 3.5 release

- Bonus on Incoming calls
- Enhanced Balance Inquiry
- Number Plan Change to allow improved operation and maintenance handling
- New ISR boards for improved SS7 signaling between SDP and SCP
- SDP Database Change
- SDP Improvements (Solaris 8, Orbix and AOL server 3.1)
- Usage Based Promotions Interface
- Mobile Number Portability Support for accurate charging of on-net/off-net calls
- SDP Balancing Service
- Realtime charging of SMS
- User-friendly international roaming based on CAMEL phase 1, CAMEL phase 2 and USSD callback capabilities

- Realtime parallel charging of multiple sessions, guaranteeing zero revenue loss
- Realtime content and service charging
- USSD Voucher Refill
- Account refill via vouchers and banking interface
- Account information via IVR or USSD, with choice of up to four languages
- Toll free numbers
- Usage based promotions
- Multi-user accounts
- Family and friends
- GPRS Charging
- JAVA based SDP GUI
- Tariff Management Application
- Warm Standby PPAS, a complete backup on the administration
- System Extended Number Support in PPAS

Services

Ericsson offers complete "turnkey" solutions. No product is complete without service solutions and for the PrePaid System wireless operators are offered services for:

- Implementation and Integration
- System Support
- Competence Development
- Migration

Technical specifications for PrePaid System 3.5

Capabilities

- Capacity of up to 20 million prepaid subscribers
- Up to 10,000 different service classes
- Up to 100 different tariff plans

Service administration management

- Directly on PrePaid Administration System (PPAS) via a graphical user interface or remotely via HTTP
- Towards SDP via HTTP IN platform

SDP platform

- Enterprise 4500 servers/Sunfire 4800
- ISR Boards
- Solaris 8
- Times Ten database

PPAS platform

- AlphaServer 4100 (Two Digital AlphaServer ES40's and one AlphaServer GS160 large 4 configuration)
- OpenVMS
- Ingress II database

IVR platform

- AlphaServer A1000A/DS20e
- Tru64 UNIX
- MG2/Netcentrex Toolkit
- IVR 3.0, up to 480 port per AlphaServer