# Motorola integrated Billing and Administration System

# **NiBAS**<sup>TM</sup>





### The MiBAS™ Advantage

MiBAS<sup>™</sup> offers operators a compelling set of benefits:

**Profitability**: New revenuegeneration opportunities, rapid and efficient introduction of new services and marketing initiatives.

Functionality: MiBAS™ offers rich capabilities, is highly flexible and is aligned to market needs based on constant monitoring of customer feedback and requirements. Modular Scalable with High Performance: While designed for high throughput – MiBAS™ benchmark tests proved support for 50 million subscribers – it is scalable to fit small to large markets.

**Proven product**: Our satisfied customers testify about the richness, stability and reliability of MiBAS™.

Future-proof: MiBAS™ is committed to continual product upgrades; is designed to support network future releases and new advanced technologies and services.

Low cost of ownership:

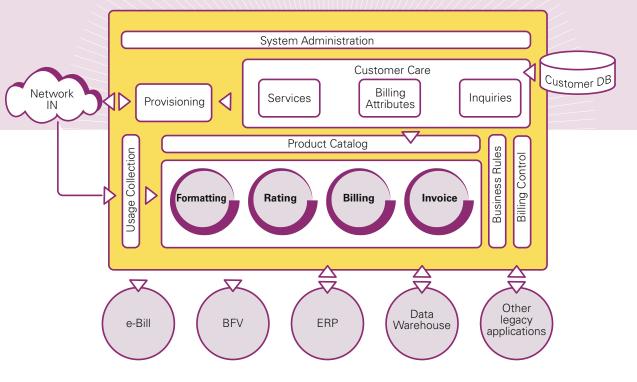
Very fast deployment of new services and products.

**Off-the-shelf Product**: Ready for rapid deployment with minimal customization.

### Part of Motorola: A billing

solution that complements infrastructure from the same leading vendor ensures short time-to-market of all new features and services.

### MiBAS<sup>™</sup> Architecture



"We thank you for the excellent service you provided during the implementation in Liberia. The MiBAS team executed the job very professionally, working almost around the clock to achieve the goals on time."

Ami Sade, CEO, Cellcom, Liberia

"The MiBAS team understands our business and is highly responsive to our functional and business needs...The migration... was a great success...MiBAS makes our life easier."

> Project Manager, SouthernLINC (SoLINC) Wireless, USA

# omorrow Beyond the Horizon

## Our vision is to be a leading provider of innovative provisioning and billing solutions for the rapidly converging telecom industry

The reduction of costs, easing of congestion and meeting profitability targets are primary goals for today's telecommunications operators.

With these goals in mind and with its finely-tuned sensitivity to customer requirements and market trends, Motorola's **MiBAS™** (Motorola integrated Billing and Administration System) solution offers a flexible, full-function billing and rating system with advanced self-care capabilities for postand pre-paid billing. MiBAS<sup>™</sup> was developed by Motorola's **N**etwork **S**ervices **A**pplications (**NSA**) business unit.

MiBAS<sup>™</sup> rich-featured, proven offerings enable the rapid provisioning of cellular telephony, dispatch (push-to-talk) and data services, adding comprehensive functionality and flexibility to the multiple services provided over today's GSM, CDMA, WiMAX, iDEN, and TETRA networks as well as Next Generation Networks. Network and digital communications operators seeking best-in-class, convergent billing, multi-service provisioning, billing and related products, will find that MiBAS<sup>™</sup> completely fulfills their needs.

Add to this Motorola's worldwide reputation for responsiveness, close customer relationships and 24\*7 service by a dedicated team with in-depth knowledge of networks gained over many years, and you have many compelling reasons to make MiBAS<sup>™</sup> your solution of choice.

# Global Markets

MiBAS™ was built from the ground up in response to the challenges of the rapidly converging telecom industry. Motorola's Network Services Applications (NSA), established in 1997 to develop and deploy integrated billing and provisioning solutions, is globally recognized for its rapid implementation and time-tomarket and for being highly responsive to customers' business needs.

Its modular and scalable solution, combined with open architecture, provides flexible configuration and integration options with any external applications and software packages supporting the latest technology, including Next Generation Networks (NGN) and telecom applications and services. Geographically, MiBAS<sup>™</sup> installed base includes operations in Asia, Africa, Latin America, North America, Europe and Australia.



# The MiBAS<sup>™</sup> Product Suite – Enhanced Billing, Provisioning and Services

Operators benefit from efficient and accelerated provisioning, rapid processing of usage information originating from multiple network elements, and are able to perform cross-segmental, feature-rich rating and present convergent billing for their customers. MiBAS<sup>™</sup> enables efficient, streamlined multi-service activation (directly or through APIs) for multi-networks through a single transaction-entry point. The feature-rich MiBAS<sup>™</sup> solution supports a host of major functions including:

### **Simplicity in Customer Care**

The simple entry of services for subscribers and efficient interaction between the customer and CSRs (Customer Service Representative) controlled by on-line validation of operatorspecific business rules, is enabled by the Customer Care module. Activity is supported by templates.

Web Access and Self-Care for **Greater Customer Satisfaction** Using this MiBAS™ module, dealers and customer administrators can remotely activate and provision services, view charges and more, without involving the operator. Designed to provide customer self-care capabilities via remote, browser-based access to MiBAS<sup>™</sup> over the Internet or Intranet; the module allows smooth and lean customer-care operations while increasing administrative control and improving customer satisfaction.

**Provisioning and Activation** of Subscriber Units for **Immediate Service** This MiBAS<sup>™</sup> module allows rapid registration, configuration, and maintenance of subscribers. It provides customers with selfcare capabilities to instantly configure and activate devices supporting a wide range of services - adding, activating, suspending subscribers, replacing handsets and assigning services. Service fulfillment is accelerated and subscriber units and services such as telephony, PTT and packet data across various platforms and technologies can be activated and maintained.

### **Resource Management**

This function manages various resources such as phone numbers, IP addresses, subscriber ID's (IMSI), PTT ID's. It also maps resources to Network Elements and maps resource pools including resource reservation per customer and "cooling-off" days. Automatic and manual allocation of resources



to a subscriber, based on subscriber services is also provided.

### Product Catalog for Appealing Marketing

Operators can build rate plans for all types of services - Telephony, Dispatch (PTT), Packet Data, and SMS, MMS and other new services - through marketing promotion plans supported by the MiBAS™ Product Catalog. Multiple rate plans are available for all supported services on the basis of periodic fixed charges, usage, free usage quantities and rounding, discount plans, and other rules. Billing terms and criteria arising from cost sharing contracts and other subscription agreements are also supported.

### **Usage Rating**

Customer's Usage Data Records (UDR's) can be rated according to the services and rate plan per account or customer. MiBAS™ rates all services/usage information available in the network - legacy and Next Generation services alike.

### **Inter-Carrier Settlements**

Individual providers can enjoy the benefits of multiple settlement periods and dedicated rate plans or different agreements between each other. Settlement calculations are provided for incoming and outgoing usage, via a set of inquiries/reports that are summarized per service provider and detailed for any level of reconciliation.

### Roaming

Supports inter-carrier roaming settlement agreements, and is responsible for exchanging and rating roaming through clearing houses.

### MiAnalyzer Facilitates Traffic Analysis

Events from the network are collected by this module and stored in a centralized database for traffic analysis reports and enquiries.

# **M***i***BAS**<sup>™</sup>

 Customer Care • Self Care · Provisioning • Resource Management Product Catalog Rating • Settlements · Roaming • MiAnalyzer

### **Robust Bill Calculation Simplifies Billing Operations**

Wireless operators can reduce the financing and accounting workload with this robust billing module. It calculates fixed and usage charges based on the applicable rate plans, supporting multiple billing cycles throughout the billing period. Billing can be run in advance or in arrears. Customer/user reports are generated, facilitating the identification and analysis of usage patterns.

### **Powerful Business Rules and Billing Control**

Enhanced operator control over billable and non-billable items, and being able to address problems of revenue leakage are some of the benefits derived from the **Business Rules and Billing** Control. This powerful tool for the effective management and enforcement of business rules, resources, and revenue assurance also aids on-line detection/prevention of exceptional behaviors (e.g. attempts to assign discounts in contravention of company's rules or otherwise).

### **Billing Simulator**

This unique and powerful marketing tool enables operators to best fit rate schemes to their customer's profile. This feature allows the use of actual historical usage data (or other baselines) to simulate marketing "whatif" scenarios, calculating charges for other appropriate rate plans. Using multiple different rate schemes, based on customer categories, ensures optimized offerings to minimize churn and to predict the impact of price changes.

·MAS

Interface Tables

• Commissions

### **Invoicing Wizardry**

A wide range of invoicing functions, accessed via an Invoicing Wizard, covers multiple cycles, validation, journal entries, statements, and a marketing text engine. This browser-based application produces files sent to the operator's Bill Fulfillment Vendor (BFV) and formatting data from MiBAS™ billing Accounts Receivable (A/R) and taxation modules and feeds back new charges into Accounts Receivable.

**Pre-Paid and Post-Paid Billing Means Better Business** Operators can increase revenue through convergent billing for both pre-paid and post-paid subscribers.

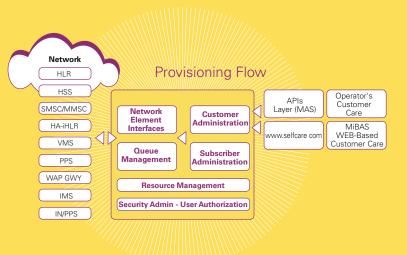
• Billing • Billing Control

Billing Simulator

· Invoicing

• Prepaid • MiBASTM Collector

- Real-Time rating for prepaid subscribers: MiBAS™ can provide a complete advanced IN solution for prepaid subscribers.
- CDR based pre-paid engine: The MiBAS<sup>™</sup> rich product catalog and billing features are available for CDR-based pre-paid subscribers if the business environment is appropriate.
- MiBAS<sup>™</sup> Pre-Paid solution: Supports all usage types -Telephony, Dispatch (PTT), SMS and Data.
- MiBAS<sup>™</sup> easily interfaces: To other third-party real-time IN pre-paid platforms.



### **Billing Mediation – the MiBAS™** Collector

Collecting telephony, dispatch, packet data, and SDS events; filtering billing events; formatting and creating Usage Detail Records for further processing are enabled by this advanced mediation solution for TETRA (DIMETRA-IP) network operators.

### MAS – MiBAS<sup>™</sup> API Layer

This tool enables accessing the MiBAS<sup>™</sup> engine from external applications and streamlines user processes via a unified XML interface. It improves operational efficiency, enhances customer service and dramatically reduces the customer learning curve.

### MiBAS<sup>™</sup> Interface Tables

A gateway to data stored in the MiBAS<sup>™</sup> database: through the Interface Tables, external applications - such as data warehouse applications - can process this data without the need to access MiBAS™ database directly.

### Commission

Helps operators to optimize sales performance and achieve revenue and profit objectives. Achieving corporate goals through efficient, easy-touse and technologically advanced Enterprise Incentive Management (EIM) solutions is enabled through this module.



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### Quality of Service is Our Top Priority

At NSA quality is uppermost in our minds. We are ISO 9001 certified and have been rated SW-CMM (Capability Maturity Model) Level IV - an outstanding achievement.

Our highly trained team includes instructors, project managers, business analysts, software engineers and integration specialists. They all work closely with customers to substantially reduce implementation time and minimize project risk. Besides installation and training services we offer the following additional services with our software licenses:

- Customization, application enhancements and technical training
- Project management, technical and integration services for software upgrades
- Back-up and disaster recovery planning

### Seamless Mobility – Motorola's Vision

Network Services Applications (NSA) is part of Motorola Inc., a global communications leader that provides seamless mobility solutions across broadband, embedded systems and wireless networks.

It's hard to imagine life without cellular phones and customers' demands drive technology forward. No longer satisfied with simple voice calls, users now want to access data through their mobile phones. They want all their devices to communicate with each other – and they need this to be simple, safe and secure. As people become more mobile, they want everything to move with them...they want a seamlessly mobile world

Responding to customers' needs, Motorola has made it possible with Seamless Mobility. By seamlessly linking networked devices, users can find everyone and everything, wherever they may be, delivered on whatever device they choose – be it a two-way radio, a laptop, or a pocket-sized phone.

Seamless Mobility harnesses the power of technology convergence and enables smarter, faster, costeffective and flexible communication. We do this by designing and delivering "must have" products, "must do" experiences and powerful networks – along with a full complement of support services.

Motorola's wide range of products includes:

- High Tech Communication
  Products
- Cellular Communications 3G Technology Leader
- Two-Way Radio Systems
- Government & Military Electronics
- Information Systems
- Mobile Data Systems
- Command & Control EquipmentPaging Systems

Motorola is a Fortune 100 company with recorded sales of US \$36.8 billion in 2005.



### Motorola, Inc.

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