

3G OSS and BILLING



SEPTEMBER 19-20, 2002 > DALLAS, TX

Achieving Profits Through Superior
Provisioning, Management and Billing
for New Mobile Data Services

Register by
August 20 and Save!

LEARN HOW TO:

- > Efficiently and Cost Effectively Manage and Deliver New Services
- > Develop and Deploy Next-Generation Wireless Element Management Systems
- > Support m-Commerce Initiatives Across Trading Partners
- > Enable New Integrated Cellular/Wi-Fi Service Arrangements

SPONSORS



PRE-CONFERENCE TUTORIAL

- > Understanding 3G Wireless Technologies and Opportunities
September 18, 2002

3G OSS and BILLING

Thursday, September 19, 2002

8:00 Registration Begins

9:00-10:15

The Impact of 3G Wireless Data on OSS/BSS

Speakers will examine the unique requirements 3G wireless data applications will impose on wireless carriers' front office/back office platforms. Topics for discussion include support systems requirements for location-based services, special account spending limit (ASL) plans, prepaid solutions and value-chain solutions (including multiple vendors and settlements), and the impact of mediating usage from multiple, diverse network elements.

- **Ron Angner**, Principal, General Manager OSS and Wireless Practices, TMNG
- **Bao Le**, Senior Vice President, Network and Application Technologies, CH2M HILL

10:15-11:00

A 3G OSS Migration Case Study – Sprint PCS

Sprint PCS is one of the top 5 wireless operators in the US, and has chosen a CDMA2000 technology migration path to double its existing capacity and increase its data rates ten fold. The speaker will discuss the design, system selection process and implementation of its OSS, which because of Sprint PCS' technology migration path and dynamics, was designed from the ground up to meet the unique requirements of such a challenge.

- **Kevin Phillip**, Director, NOCC, Sprint PCS

11:00-11:15 Break

11:15-12:00

“On-Demand” Service Brokering: Implementing an Effective Integration Layer for Rolling Out and Managing 3G Services

3G requires that wireless carriers be able to roll out and manage multiple new revenue producing services and applications. Existing wireless carriers' BSS/OSS do not provide the ability to manage the “on demand” aspects of these services. By implementing a service broker layer in their service delivery architecture, service providers can reduce the level of effort required to add, manage and deliver additional services. The speaker will outline the key components and functions of service brokering and differentiate the “on demand” brokering functions from traditional BSS/OSS transactions.

- **Chris Finn**, Managing Principal, Global Telecom Industry Practice, IBM Global Services

12:00-1:00 Lunch

1:00-1:45

Billing for Content-Rich Services

The speaker will discuss how select European mobile operators implementing 2.5 and 3G systems today are addressing the new billing requirements. He will also describe what next-generation wireless services are likely to look like moving forward, explain how revenues are settled today and how we can expect them to be settled in the future.

- **Graham Carey**, Director of Product Marketing, Europe Amdocs

1:45-2:30

Thin or Thick? The Wireless Element Management System

To stay competitive as 3G evolves, wireless operators must not only develop and deploy highly differentiated, managed services but also the management support systems required to run them. In this talk the speaker will review the decision points, technology issues, ROI metrics and strategies required to deal with business and technology issues simultaneously. The presentation will highlight the ways differing philosophies in systems deployment affect the workflow across the organization and the ability to manage an end-to-end service delivery process. Case studies drawn from actual client engagements will be provided.

- **Nicole Gillen**, Director, Service Provider Solutions Greenwich Technology Partners

2:30-2:45 Break

2:45-3:30

Massive-Scale, Multi-Service Fulfillment for Wireless

Rapid delivery of revenue-generating service is critical to the success of wireless data. The speaker will present a description of the multiple layers of services that need to be provisioned, and describe a data-driven approach that links information across the OSS. This environment is underpinned by a scalable data backbone that connects users, products, services and devices. He will provide a practical demonstration of instant service creation and delivery of content and services to PDA-type devices.

- **Peter Farrimond**, Principal Architect, JacobsRimell



3:30-4:15

Real-Time Metering and Billing: The Foundation for Mobile Data Services

This presentation will cover the need for network operators to allow third-party providers to enable content-based billing and access to prepaid account information, create new partnering and revenue opportunities and reduce fraud. He will give an example of how mobile Virtual Private Networks (VPNs) can be created between subscribers and back-end content providers and will detail flexible billing options that can be enabled by advanced content-based metering capabilities.

- **Mark Tubinis**, CTO and Founder, WaterCove Networks

4:15-4:30

Break

4:30-5:15

Service Assurance: The Future of Wireless Networks

Service assurance is the key to the future of wireless and the reduction of customer churn. With the explosion in consumer demand for wireless services and an increasing limit on the spectrum, service assurance is the way to safeguard increasingly critical and complex 2.5 and 3G transmissions while helping consumers achieve flawless service. The speaker will offer provocative examples of how 3G wireless networks will be attained sooner than later.

- **Todd Eliason**, CEO, WatchMark Corporation

5:15-6:15

Reception

Friday, September 20, 2002

8:30-9:30

OSS/BSS Implications for Integrated Cellular/Wi-Fi: A Case Study

KPMG Consulting worked with a private university and a major wireless service provider to conduct a pilot program of an in-building wireless solution that integrates macro voice/data for enhanced reception of cellular signals as well as WLAN (802.11b) capabilities. Using a single infrastructure to provide both services, the University expects to achieve significant cost savings. The speaker will address the implications to the service provider's billing and operations support systems resulting from this cutting-edge service arrangement.

- **Joe Sims**, Managing Director, KPMG Consulting
- **Ken Rabun**, Emerging Technologies Practice, KPMG Consulting
- **Carl Whitman**, Executive Director of e-Operations, American University

9:30-10:15

Next Generation Services: Is Billing Still a Differentiator?

Drawing upon the speaker's experience upgrading wireless billing environments on GSM networks, this presentation will examine evolving strategies for billing next generation wireless services. Through a brief case study of billing replacement at a leading European operator, attendees will learn the significance of billing to the development of wireless services and how customer preferences and expectations will dictate the different methods of payment to be offered.

- **Robert Machin**, Billing Proposition Manager, Telecoms Solutions International Business Unit, Logica

10:15-10:30

Break

10:30-11:15

M-Commerce Behind the Scenes - Wholesale Billing and Settlement

Regardless of the service, content or consumer payment mechanism, everyone involved in an m-commerce value chain wants a cut of the revenues. The speaker will provide a detailed look at the components required to support M-Commerce behind the scenes based on lessons learned from roaming. Trading partner management, inter-company billing formats and processes, transaction management and financial settlements will all be addressed.

- **Parry Snow**, Vice President, Global Marketing, CIBERNET Corporation

11:15-12:00

Monetizing Traffic

The business models for the new breed of mobile data services include time, volume and content-based accounting. This data will be generated by the network infrastructure, including a variety of proxies and application servers. The billing processes that use this information include called- and calling-party-pays rating scenarios, partner revenue sharing, as well as pre- and post-paid revenue booking. In this complex environment, mechanisms must be put in place to correlate and integrate different sources of accounting data to give the operator the maximum flexibility to develop and market compelling, differentiating offers. The speaker will highlight the role of the network infrastructure and the accounting challenges associated with the rollout of services such as MMS and prepaid, and possible solutions.

- **Alan Cohen**, Vice President, Marketing, Tahoe Networks

Understanding 3G Wireless Technologies and Opportunities

Presented by **Dr. Jerry Lucas**
Founder and President, TeleStrategies

Wednesday, September 18, 2002 • 9:00 a.m. - 5:00 p.m.

This seminar is designed for the non-technical telecommunications, strategic alliance or investment professional who must understand today's wireless technologies, Internet access and e-commerce opportunities.

If you need to understand the technical language of wireless technology, how the technology building blocks fit together and must separate wireless hype from reality, this seminar is for you.

INDUSTRY OVERVIEW

- A. THE PLAYERS: The big six wireless carriers, their technologies and markets; The big four infrastructure vendors and their customers; Niche vendors (Aether, Baltimore, Openwave Systems, RIM, SignalSoft, etc.); Wireless billing, OSS, e-commerce vendors and more.
- B. MARKETS: Why, when and where 3G network services; North America vs Europe vs Japan vs developing nation markets; Wireless Internet readiness; e-commerce and other marketing opportunities.
- C. REGULATION: US regulatory structure and status; Key issues pending in 2002: number portability, E911, calling party pays, spectrum caps, auctions and more.
- D. INFRASTRUCTURE BASICS: RF, modems, antennas and multiple access; 2G, 2.5G, 2.75G, 3G and 4G - what's the difference; SS7; When and where AMPS fits in year 2002 and beyond.

TDMA/GSM/GPRS/EDGE OVERVIEW

- A. BASICS: What's TDMA and how does it work; Digital coding; Modulation; Multiplexing; Signaling; FEC; Echo control; and outlook for IS-136.
- B. GSM: What's GSM; Why its the world's most selected 2G system; Differences with IS-136; Control features; SMS, SIM card and 2.5G capabilities.
- C. GPRS: What's GPRS; Relationship with 2G GSM; SGSN; GPRS; Mobile IP; Security; Data rate options; Service providers roll out; terminal availability and always-on features.
- D. EDGE: Technology basics of EDGE; Transition paths from IS-136 and GSM; Strengths and weaknesses vs. W-CDMA; Outlook for high QoS and 384 Kbps service in North America.

CDMA OVERVIEW

- A. BASICS: What's CDMA and how does it work; Spread spectrum; Code multiplexing; Applications; Strengths and weaknesses; Short and long PN codes, Walsh codes, rake receivers, soft handoff, power control, pilot channels and more.
- B. CDMA 2000: Technology basics of CDMA 2000; Transition paths through 1X, 3XMC and HDR; CDMA 2000 vs. GPRS/GSM; Unique applications; Outlook for high QoS and 384 Kbps services in North America.
- C. W-CDMA: Technical and service differences between CDMA 2000 and W-CDMA; UMTS vs FOMA; Lessons learned in Japan and Europe; Outlook for W-CDMA in North America.

WIRELESS INTERNET AND MESSAGING

- A. TODAY'S AVAILABILITY: How will IS-136, CDMA, iDEN and GSM expand service offering capabilities; iMode vs. North America 2G wireless data; 2G vs. 2.5G capabilities; Billing/OSS requirements.
- B. SMS: What's Short Message Service and how does it work; North American vs. European experience: what's different; Capacity, latency and auditing considerations; Future applications; Why the outlook is dim in North America.
- C. WAP: What's WAP and how does it work; The good, bad and ugly about WAP; Vendor champions; Applications and service readiness; Outlook
- D. i-Mode: What makes DoCoMo i-Mode so successful; cHTML vs WAP; Java enabled i-Mode, Pricing and W-CDMA FOMA at 384 KBPS.
- E. UNLICENSED: What's unlicensed spectrum; Bluetooth vs. 802.11b technology issues; ISM; Spectrum outlook; What's Ultra Broad Band; What's WiFi; Competition or complementary; Economics; Hot spot carriers and more.

WIRELESS IP CHALLENGES

- A. SECURITY: Why wireless security is difficult; PKI; IPsec; Wireless IP-VPN; Digital signatures; Certificate authorities and carrier readiness.
- B. QoS: What's Quality of Service; What's the problem with 2G QoS; What does GPRS and cdma2000-1X deliver and what are the 3G QoS challenges regarding billing and other OSSs.
- C. IP MOBILITY: What's challenging about IP mobility; Simple vs full mobility; IETF approaches vs GPRS.

3G WIRELESS KILLER APPLICATIONS

- A. LOCATION: Where does 3G location technology stand/ E911 readiness and location interoperability forum options: A-GPS, E-OTO, UT-TOA, CGI-TA and others.
- B. E-COMMERCE: Where is it working; "Walled garden" strategies; Transaction revenue/advertisement opportunities and billing.
- C. MULTIMEDIA SMS: What's MSMS, bit rate, QoS and billing/OSS requirements; Terminal availability and content options.
- D. CONTENT: Why is wireless content billing, provisioning and QoS requirement so challenging; Content rating; Revenue sharing and settlements; Where does BREW and m-Mode fit and more.

Come to this conference to learn how to profit from 3G!

Wireless operators are banking on migrating to next-generation 2.5G (GPRS, EDGE, CDMA 1XRTT) and 3G (UMTS, CDMA 2000) wireless services to break out of the commodity "minutes" business and reverse declining ARPU (Average Revenue Per User) with new value-added services. The promise is exciting, but will it happen?

The challenge for carriers is not the network, but rather the back office, where operators will need to quickly deploy, manage and bill for a wide variety of content-rich, value-added services. This migration to "always on" IP-based mobile networks presents a challenging set of related requirements for authentication, authorization and accounting; QoS; security; management; mediation; real-time credit management, metering and billing; and trading partner management.

Existing back office systems fall short in meeting these new requirements. Location-based services, SMS, MMS, hotspot roaming and the new world of partnership arrangements create a whole new set of information elements that need to be supported. Unless carriers address these issues at the outset, they are unlikely to realize the hoped-for benefits of 3G and recoup the huge expense associated with the transition.

TeleStrategies' **3G OSS and Billing** conference brings together the thought leaders addressing these issues today. You will get the information you need to deliver on this promising new technology and accelerate your company's time to revenue!

For information on sponsorship opportunities, contact Lynn Peyer at 703-734-2610 or email lpeyer@telestrategies.com

REGISTRATION INFORMATION

REGISTRATION FEE:

- Conference\$1,295
- Tutorial\$895
- Conference & Tutorial by August 20, 2002\$1,295
- Conference & Tutorial after August 20, 2002\$1,895
- CD-ROM of Conference Proceedings\$195
- CD-ROM of Conference Proceedings
for non-attendees\$495

PREPAYMENT REQUIRED:

(payment in full is required before attendance)

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Special Offer! Register and pay by August 20, 2002 and receive the pre-conference tutorial FREE! An \$895 value!

Conference Hotel: *3G OSS and Billing* will be held at the Renaissance Dallas-Richardson Hotel, 900 East Lookout Drive, Richardson, TX 75082. To reserve a room, please contact the hotel at 972-367-2000. The hotel holds a limited number of rooms until approximately three weeks prior to the conference. When reserving your room, mention TeleStrategies to receive the special rate per night of \$119.00.

Conference Payment: Your registration fee must be paid prior to the event. VISA, American Express, MasterCard, Diners Club, Discover, company check, personal check and wire transfers are acceptable forms of payment. To arrange a wire transfer, please contact our accounting department at 703-734-7050 or via fax: 703-556-3959; email: accounting@telestrategies.com

Transfers & Substitutions: Transfers and substitutions are permissible up to 24 hours in advance of conference date. Refund restrictions may apply.

Cancellations and No-Shows: There is no penalty for cancellation if it is received in writing two weeks prior to the conference date. After that date, a 25% service charge will apply. Registrants who do not cancel before the conference date and do not attend are liable for the full registration fee. If conference is postponed or cancelled, TeleStrategies is not responsible for airfare, hotel or other costs incurred by registrants.

Register now at www.telestrategies.com or call 1-703-734-2600 / fax 1-703-734-9371.

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*"TeleStrategies has a knack for making
sense out of this turbulent telecom
environment...Good Job!"*

—Jared Wildenborg, Cingular Wireless