Alcatel News

Top issues:

Dear Reader!

Welcome to the May edition of Alcatel News! From backbone and gateways to mobile technologies, Alcatel offers you a complete portfolio of products and applications for the future of mobile communications.

In this edition we bring you facts and news on both products and applications. Please take a good look at the brand new Free-Space-Optics Solution or the unique Mobile Beacon Technology. Peruse the new Alcatel Parlay/OSA Gateway, the basis of introduction for new services. Note the recently launched version of our Multimedia Messaging Services (MMS) – a product that really sets itself apart from what has been on the market to date. Alcatel enables you to focus on optimizing service offerings and revenue streams. It's a really challenging market – and exciting as ever. Enjoy the spring edition of Alcatel News!

Lars Kuba

Alcatel MMS in a class of its own

Alcatel recently launched Version 2.0 of its Multimedia Messaging Services (MMS). This Alcatel product really sets itself apart from what has been available on the market to date:

Alcatel's MMS has the highest performance ratio per CPU. It is a reliable and scalable full Intel/ Linux server-based solution, designed for the MMS mass market. It delivers performance of several dozen Multimedia Messages per second during a single low-cost server benchmark (available on request). Alcatel's approach allows Telecom Operators to significantly reduce OPEX and CAPEX, and be prepared for a large-scale MMS launch.

Alcatel's MMS is interoperable with all mobile phone brands (both MMS-enabled and legacy phones), both in pure mobile and web-to-mobile modes. This feature is key to accelerating the adoption of Multimedia Messaging by the end-users. As a network- and terminal-independent application software provider, Alcatel has launched an IOT program (Inter Operability Testing) to ensure far-reaching interoperability between its MMS solution and handsets, as well as legacy SMS and email systems. *Continued on page 2…*

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Alcatel's MMS offers all the functionality for simple and flexible billable MMS services whatever the telecom operator strategy (pricing policy based on size, content, type, origin, push/pull, etc.)

Ovum Principal Analyst John Delaney comments: "If it really helps operators with interoperability, Alcatel's approach may prove to be an important advantage when it belatedly launches its MMS-C product in the first half of 2003. Alcatel has had to take a boldly different approach which clearly distinguishes it from the other traditional telecom vendors."

Open your Net for applications!

Today the telecom industry is considering numerous Open Service Architectures (OSA) based on Open Application Programming Interfaces (API) (Parlay, 3GPP/OSA, JAIN), which have the potential to bridge the gap between traditional telecom services and complex telecom protocols with the minimum of risk to investment.

Based on the Open Services Platform (OSP) the **Alcatel 8601 Parlay/OSA Gateway R1.1** allows the Third Party Developers community to create innovative services making use of the underlying network resources while guaranteeing the security and reliability of the network. More and over that, it provides the Generic Call Control Interfaces and Framework Interfaces and can operate in a multi-client application environment.

Already end of last year, Alcatel performed trials with major European operators based on Ericsson CS1, successfully. With Skanova Alcatel has a system in commercial use.

Mobile Beacon: Mobiles as service level monitors

Alcatel has launched a technology that brings substantial improvement to wireless service level monitoring on the mobile phone. Called **Mobile Beacon Technology**, the new technology (patent pending) creates a lightweight mechanism to detect network coverage issues and interaction issues between applications, SIM cards and phones. Application providers can set flags or beacons in their mobile applications to detect events of interest for analysis, reporting & alerts. Beacons can warn of service malfunctions, guide towards service improvements, and measure the fit between the operator's target market and the subscribers using the services. Alcatel is cooperating with SIM card vendors, system integrators, application providers and mobile phone manufacturers to bring the new technology to wireless operators.

Currently, operators have limited their service level monitoring to the network. Alcatel's new technology complements existing monitoring by turning users' cell phones into network monitors warning against issues difficult to detect from within the network: reduced cell coverage or spurious handovers. By harnessing thousands of end-users' cell phones, operators' network maintenance teams are better positioned to anticipate service issues.

Mobile Beacon Technology can help operators increase their revenue stream and reduce churn by enabling them to identify and rectify flaws in the interaction between various mobile components (network, handset, application, SIM card etc.). Better end-user experience leads to increased service use and an improved bottom line.

Live TV on your handset with RTL television

Alcatel and TNO Telecom, a center of innovation in the Netherlands, have launched a project with RTL Television for the development of innovative new 3G/UMTS mobile applications and services. At CeBIT, Alcatel and TNO Telecom showed live RTL television broadcasts on mobile handsets, using Alcatel's latest Evolium™ 3G/UMTS technology and TNO's 3G Internet Video Gateway.

This live demonstration shows an exciting new application of mobile communications: the ability to watch live television, anywhere, any time. It provides a glimpse of the communications technology of tomorrow and is an example of how this technology will change our lives.

"On the road to UMTS, operators need end-to-end solutions that can generate the next growth wave," declared Marc Rouanne, Chief Operating Officer of Alcatel's Mobile Communications Group. "This project is a good illustration of Alcatel's openness, making its technology available to content owners and enabling them to leverage Alcatel's advanced systems for local applications."

TNO Telecom has recently joined the worldwide 3G Reality Center Program in order to share in the development of a 3G **Internet Video Gateway**, enabling content providers to offer video streams to mobile users quite easily.

Major UMTS Contract awarded in Austria

Alcatel has announced the closing of a contract with tele.ring, the Austrian fixed and mobile network operator, for the supply of a turnkey 3G/UMTS network. Network deployment beginning in May will cover Vienna, Graz and Linz – 25% of Austria's population – by the end of 2003.

As specified, Alcatel will introduce a complete set of UMTS features and network configurations in tele.ring's GSM/GPRS network thanks to its field-proven Evolium™ multi-standard base stations. Alcatel's Evolium™ 3G/UMTS solution features the UTRAN (UMTS Terrestrial Radio Access Network) radio systems with UMTS base stations (Node B) and Radio Network Controllers (RNC), the packet core network systems, and transmission equipment.

The Evolium™ multi-standard platform integrates all technologies from GSM/GPRS to EDGE and UMTS, allowing an all-in-one solution for a smooth upgrade of networks. Alcatel's approach to the introduction of UMTS in GSM networks focuses on protecting the operator's investment in general, and on Radio Access Network (RAN) in particular. "We have partnered with Alcatel building high-quality networks that will meet the high growth demands of our GSM/GPRS subscribers for a long time to come", declared Hubertus Hofkirchner, tele.ring's Chief Executive Officer. "We chose Alcatel's 3G/UMTS solution as it permits flexible upgrading of existing infrastructure, enabling us to offer seamless 2.5 G and 3G services to meet customers' needs." tele.ring and Alcatel agreed already on a service agreement for tele.ring's mobile network in June last year. Worth 40 million Euro, the contract covers the maintenance of tele.ring's complete mobile network over a three-year period.

Expansion of GSM network in Ukraine

Alcatel has signed a multi-million Euro contract with UMC – Ukrainian Mobile Communications, the Ukraine's leading mobile operator – to expand its GSM network. The collaboration between Alcatel and UMC started back in 2000 when Alcatel began delivering mobile phones, and by 2002 it had equipped UMC's network with a new Call Center based on the Alcatel 4400 solution. This was followed by two tenders for microwave equipment, and by SDH (Synchronous Digital Hierarchy) systems supplied for UMC's backbone network.

Based on this general agreement, Alcatel will strengthen its relationship with UMC, supplying its Evolium™ GSM solutions to optimize UMC's existing infrastructure and accelerate the deployment of new-generation products and services. Alcatel's Evolium™ GSM solutions include a Network Subsystem (NSS), a Base Station Sub-system (BSS) and an Operations and Maintenance Center. Both parties also signed a Services Agreement related to the deployment of this network expansion. Further, Alcatel will enable UMC to offer advanced mobile applications providing high-quality state-of-the-art voice and data services.

"We are sure that Alcatel's Evolium™ GSM solution will allow us to continue to expand our coverage and provide services of the highest quality. The number of UMC subscribers increased by 64.7% last year and we expect a further increase in the subscriber base in 2003," said E. Franke, CEO of UMC. Today, UMC serves over 1.7 million subscribers.

Wireless broadband access with FSO

Wireless transmission infrastructure offers the quickest and cost effective way to start up and get a fast return on investment in today's fast-growing networks. This has spawned a new wireless transmission technology called FSO – Free Space Optics. Alcatel offers two FSO products to round out its wireless range:

Alcatel 9400 FSO is a PDH low-/medium-capacity Free Space Optics system. It is a cost-efficient alternative for urban interconnectivity roles such as private or corporate networks and mobile backhauling. Alcatel 9400 FSO can help service providers enhanced services for any type of customer at lower cost, generating more revenue. It is not subject to licensing and regulation, allowing quick and easy deployment with rapid ROI.

The **Alcatel 9600 FSO** is a SDH/SONET high-capacity Free Space Optics system available in three different versions: SH (Lightweight and very compact for short haul), MH (Very powerful system for medium-haul high-availability links) and LH (Includes a tracking system that supports a very narrow beam width for long-haul links with maximum availability). The Alcatel 9600 FSO is a cost-efficient last-mile solution for Metro Area Network (MAN) providers.

The mobile multimedia offensive

At the CeBIT 2003 Alcatel presented three new mobile telephones with color displays. The One Touch™ 332, One Touch™ 535 and One Touch™ 735 are designed to provide optimal support for new multimedia applications. They are particularly easy to use with feature compact dimensions and high-resolution color displays.

The **One Touch™ 735** supports the MMS, EMS, WAP and GPRS Class 10 standards as well as the exclusive Alcatel Voice Message Service. VMS allows voice memos to be treated like an SMS: You can simply record a voice message and transmit it. You can also save VMS messages and play them as often as you like. Another highlight is the integrated digital camera with Zoom function. Coming with three pre-installed games and a download games catalog, the mobile is equipped for all multimedia services.

The **One Touch™ 535** is also based on the GPRS mobile radio standard and – thanks to state-of-the-art MMS technology and a large color screen – offers users access to all information and entertainment services. The Alcatel Voice Message Service rounds out the communications features. And with its metallic case, the mobile is also very attractive design-wise. Its Gameboy-like interface also makes it a great companion allowing perfect handling for mobile professionals!

The **One Touch™ 332** was specially developed for users who appreciate a cost-effective mobile but don't want to forego important features: storage for 30 text messages downloading and transmission of ringing tones, logos and animation via EMS plus WAP make the mobile a true communications center. Users also love the color display with 4096 colors and a hands-free facility.

The One Touch™ 535 will be available in July, while the One Touch™ 735 and One Touch™ 332 will be at dealers in September/October.

GPRS and WLAN: Session continuity

The Wi-Fi Standard (IEEE 802.11b) is the result of growing interest on the part of mobile network operators in increasing the availability of high data rate to nomadic users in so-called hot spots.

In this context, Alcatel set up two demonstrations of vertical handover to ensure seamless services for users moving across such heterogeneous networks.

This session continuity permits the high-rate terminal to remain "always on" for services such as instant messaging and multimedia calls, and to handle associated incoming traffic via the best available radio interface.

Exhibited during the 3GSM 2003 in Cannes, the first setup demonstrated seamless VPN tunnels handoffs over xDSL, GPRS and WLAN using a joint Alcatel/IBM approach.

The second setup relies on a standard IETF protocol called "Mobile IP". A solution of this type has been implemented and successfully tested in the 3G Reality Center in Vélizy, France. It was also demonstrated to Orange in January and to BT Group in April – showing a laptop computer with GPRS/UMTS and WLAN cards moving across heterogeneous coverage.

Both setups achieved full session continuity for downloading large volumes of data (FTP transfers, video streaming).

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