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# MMS – Evaluating Its True Potential

**BOTH 2.5G AND 3G OPERATORS EXPECT MULTIMEDIA MESSAGE SERVICE (MMS) TO BECOME A TRUE MASS-MARKET SERVICE THAT WILL QUICKLY DRIVE BUSINESS PROFITABILITY. BUT WHAT ARE ITS KEY SUCCESS FACTORS AND POTENTIAL PITFALLS? ALTHOUGH MMS HAS GREAT POTENTIAL, A NUMBER OF ISSUES MUST BE ADDRESSED TO ALLOW THE SERVICE TO TAKE OFF RAPIDLY. THIS ARTICLE EXAMINES THESE KEY ISSUES AND SUCCESS FACTORS.**

## WHAT EXACTLY IS MMS?

Multimedia Messaging Service (MMS) is an emerging messaging standard currently being defined by the 3rd Generation Partnership Project (3GPP) and the WAP Forum. MMS is an evolution of the traditional messaging services that goes beyond simple text and voice messaging by allowing users to send and receive messages through a whole new array of media types, including text, audio, images and eventually video. The display of an MMS message on the terminal can be compared to a mini-PowerPoint slideshow.

MMS messages can be sent between mobile terminals, from a mobile terminal to a server application, or pushed from a server application to a mobile terminal.

## THE POTENTIAL OF MMS

Short (Message/Messaging?) Service (SMS) has become (a/the?) killer application of 2nd generation networks, particularly in Europe and parts of Asia. The MMS migration path is intended to leverage the well-established SMS paradigm by adding new functionality and new content types in user-friendly steps.

For consumers, MMS is expected to deliver easy-to-use utility and fun. Network operators expect MMS to be driven by the youth market, and gradually become a true mass-market service. MMS has great potential to become a major cash cow, both for 2.5G operators and 3G operators.

## SUCCESS FACTORS AND KEY OPERATOR ISSUES

Although MMS has tremendous potential, a number of issues must be addressed to allow the service to take off rapidly. The following sections identify some key success factors.

### Handset Availability

The commercial availability of handsets has often been the Achilles' heel when launching a new service. The launch of both WAP and GPRS was restricted by the complete lack of handsets. It is, as always, imperative that MMS-capable handsets be available through all user segments, including high-end handsets such as the Ericsson T68 and Nokia 7650, but perhaps even more importantly, low-end best sellers with MMS. MMS will not take off quickly if there is not a critical mass of MMS-enabled terminals that are even easier to use than sending a short message today.

### The Right Pricing

The youth market is a price-sensitive market. Operators expect this market to drive MMS usage. MMS must be priced so that the user pays a fixed price per message. MMS can certainly be classified and priced in several categories: a message with a slideshow and accompanying sound is priced higher than a message that only combines a picture with text. The critical issue is that the sender/receiver has control over costs when using MMS.

### Network Interoperability

Interworking of SMS between national and international networks was one of the factors that contributed to the service's success. In the

same way, users must be able to send multimedia messages across mobile networks and countries in order for MMS to be successful.

MMS has also been standardized to work between mobile networks and the Internet. Operators are left with the challenge of finding viable interconnect models where messages can be terminated across mobile networks with appropriate interconnect charges, and, at the same time, delivered to/from the Internet where interconnect and termination charges are not in place.

### Critical Mass of Users

Operators want to ensure that a critical mass of MMS users is rapidly achieved. The fact that MMS has been standardized to work between mobile networks and the Internet from the start will help achieve this. Although MMS is mainly intended for mobile users, the right Web and PC-based MMS applications will help operators ensure a critical mass of potential MMS users.

### CONCLUSION

MMS certainly has the potential to become a triumphant successor to SMS. However, this requires that the wireless community develop MMS services in the right direction, focusing on the end-user value proposition and not on the technology. Addressing the issues outlined above will help ensure a rapid take-up of MMS service.

A white paper with a further analysis of MMS is available at [www.northstream.se](http://www.northstream.se).

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**About Northstream:** *Northstream provides operators, manufacturers and other players with independent and unbiased advice on opportunities presented by GPRS and 3G. Along with this Northstream provides recommendations on key technical and commercial issues in mobile data services and advice the players of the industry on their strategic position and value proposition.*

# Upcoming Events

**GSM in Northern Africa**  
Incorporating North, West, East and Central Regions  
April 8-10, 2002  
Casablanca, MOROCCO

**Telesystem-Argo Global Capital Annual Meeting**  
April 17-19, 2002  
Indian Wells, California, USA

**SMS Congress 2002**  
Exploiting the Full Revenue Potential of Messaging  
May 14-15, 2002  
London, UNITED KINGDOM

**GPRS Congress**  
Capitalize on the Promise of GPRS Technology  
May 28-29, 2002  
London, UNITED KINGDOM

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## 3GSM World Congress

Once again in February, Cannes played host to the 2002 3GSM World Congress and its wireless crowd, which consisted of more than 25,000 people! The Congress provided many of our portfolio companies with the perfect opportunity to introduce themselves to this global market for the first time, as well as to reinforce their existing contacts.

To facilitate this networking effort, Argo Global Capital, in partnership with Nokia Venture Partners and St. Paul Venture Capital, organized a "Wireless Ventures" reception in the heart of the Palais des Festivals. More than 300 portfolio company representatives, carrier contacts, key industry executives and other individuals joined us for this enthusiastic, intimate gathering, which was both a first and a total success. See you all again next year!

## Top 10 Issues of Wireless CEOs

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- Location-based services are believed by many to be an important enabling technology for generating revenues quickly. A few operators have already launched such services to allow subscribers to find restaurants, hotels, friends, family and more. Unfortunately most services are limited to users of the same operator and within the home country. To enable a rapid take-up by the mass market and to foster creativity among application providers, common APIs and interworking/roaming between operators need to be provided.
- Multimedia Messaging Service (MMS) was definitely one of the main themes at the 2002 3GSM World Congress in Cannes. Many operators are in the process of procuring the necessary infrastructure and planning for the new services. The primary challenge is to determine when sufficient volume of MMS-enabled terminals will be available and what functionality they will have. We predict that it will take another year before adequate volumes of terminals in different price ranges will be available and before MMS really takes off. Operators should start planning for that eventuality now.
- The impact of color displays is still being debated in Europe, and Cannes was a huge disappointment in terms of terminals with color display and Java support. In Japan, the debate about Java and color is nonexistent: you cannot sell a terminal with a black and white screen or without Java support. The challenge for operators in the rest of the world is how to reduce terminal replacement cycles in order to take advantage of the revenue-generation opportunities that MMS, Java and color displays appear to offer.
- GPRS usage is still low and, in a recent study, it was found that only 10% of the users in Sweden with a GPRS-enabled terminal actually subscribe to the GPRS service. This figure (or lower) more than likely depicts the reality in most countries and is a clear warning sign. Since most users do not understand the services offered by GPRS, they tend not to subscribe to GPRS. It is time to clearly communicate the value of GPRS services to users, especially before the industry tries to put 3G in their hands.
- The 2002 3GSM World Congress was a stark reminder that some things in this industry take too long. Thousands of GPRS-enabled terminals with GPRS subscriptions were "degraded" to circuit switch because GPRS roaming was not up and running in Cannes. Unfortunately, the same situation is true all over the world. The key issue is not technical problems but rather how to charge roaming (and home) customers. A pragmatic approach and price model for roaming charges must be developed rapidly in order to boost GPRS traffic worldwide. An initiative from GSM A might help resolve this matter in a timelier manner.
- A growing number of countries are starting to acknowledge the fact that the commercial launch of 3G will not take place as planned or promised. For regulators,

this is a delicate matter since they need to balance the reality with forward-looking actions to ensure that the networks are ready when the terminals finally appear. For operators, there are huge savings to be made by postponing procurement and rollout as much as possible without breaching the regulatory requirements.

- Operators and regulators in most countries now consider network sharing to be the main solution for cutting costs and accelerating network rollout. In the US, AT&T and Cingular recently announced plans for network sharing for their GSM/GPRS and EDGE rollout. Several technical and commercial issues have yet to be resolved by the parties involved, such as how to terminate the sharing agreement if required. Some operators also fear what the verdict by the competition and anti-trust authorities will be on network sharing.
- Several operators have decided to use more than one vendor for their initial 3G rollout. During the days of GSM rollout, operators did not normally use a second supplier until several years after the initial launch. As it stands now, interoperability issues will clearly be one of the main challenges in the coming year. Interoperability will also be key to survival when it comes to network sharing. In Sweden, four networks delivered by Ericsson, Nokia (for two of the operators) and Alcatel will need to work seamlessly with each other in an advanced way that was not foreseen when the 3GPP standard was developed.
- An increasing number of operators in the Americas are joining the GPRS/EDGE route established by AT&T Wireless and Cingular. Several announcements by terminal vendors clearly indicate that we will see terminals for D-AMPS and GSM/GPRS combined in the coming months. EDGE terminals for the Americas market are also promised in the near future. Given this, EDGE can probably fly on its own merit. In the European market, it is still uncertain what role EDGE will play. On the terminal side, a combined EDGE and WCDMA terminal is a definite requirement for EDGE's success in Europe. So far, official support for EDGE by a major European operator is lacking. Such support is necessary in order for manufacturers to put a priority on EDGE products.
- The debate on what effect Public WLAN services will have on the 3G and GPRS business case is still alive and kicking. As mobile operators begin to understand their role in this game, they are analyzing the business case and its effect on the 3G case. To add to the complexity, we are now starting to see an interest in products for the UTRAN TDD standard. UTRAN TDD could potentially provide high-speed IP access comparable to WLAN in the near future but with coverage comparable to the UTRAN FDD technology. Mobile operators will be largely responsible for determining the role of these technologies and how to combine them to offer seamless mobility for high-speed data.

For further information or to contact Northstream, please call Mr. Tommy Ljunggren, Co-Founder, at + 46 8 56484800 or visit [www.northstream.se](http://www.northstream.se).

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## Digital Bridges Ltd.

has purchased the software assets of GR8, the mobile ringtone and logo vendor. Digital Bridges will be able to integrate ringtones, icons and other downloadable content into its other mobile services, enabling it to accelerate its expansion into the ever-popular download market.



## EMPOWER INTERACTIVE GROUP LTD.

, a pioneer in high-performance technology for two-way application messaging, announced the first commercial installation of a high-volume, cross-network, application-terminated platform in the UK with mBlox. This VMR (Virtual Mobile Redirector) deployment builds on installations currently underway with multiple customers in Europe and worldwide. Consumer direct-response applications can now be delivered across the VMR using full telephone numbers instead of short codes. Content providers will only need to publish one number per application to reach the global mobile market. Interactive games, quizzes, alerts and interactive SMS will also be accessible to all network subscribers, whether at home or from abroad.

## Cambridge Positioning Systems Ltd. (CPS)

and SingTel Mobile will provide Asia with the benefits of high accuracy mobile location services and technology. SingTel has chosen CPS due to its more accurate solution between 50 and 100 meters. SingTel already provides Cell-ID-based location information services on its GSM network. CPS' E-OTD (Enhanced Observed Time Difference) method of location determination is widely regarded as the most viable solution for GSM operators around the world.



**CPS** has signed a five-year deal with the Siemens Information and Communication Mobile Group. CPS will license its Cursor software to accurately locate mobile phone handsets within mobile networks. It will also provide E-OTD software integration for Siemens handsets via its integration facility in Cambridge.

## Hotsip joined the Cisco Ecosystem Partner Program

in order to deliver communication applications for mobile and fixed communication networks. Hotsip's communication systems are based on SIP, an Internet standard for delivering voice and real-time services over the Internet and IP networks. Cisco will work with Hotsip to help promote Hotsip's Active Presence and Presence Engine systems. Combining both systems and Cisco's line of VoIP gateways will allow consumers and mobile workers to coordinate their telephone, instant messaging, presence, video communications and gaming through an intuitive interface at anytime.



## REALVision Technology Ltd.

has been chosen by StarHub, Singapore's leading info-communications provider, to help enhance its customer service. With REALVision's REAL GPRSConf v1.0, StarHub users are able to quickly configure PDAs in order to access StarHub's full suite of mobile data services, which includes high-speed, wireless, instant access to the Internet and the latest news and information via their PDAs.



## ONMOBILE SUCCESSFULLY DEPLOYS WITH ORANGE INDIA

OnMobile's multimodal platform and applications were successfully deployed last November by Orange India (Hutchison), enabling the commercial carrier to offer speech-activated, value-added services. Even with minimal advertising and promotion, Orange India's multimodal service penetration has increased by more than 200% over the last three months. Since introducing the advanced wireless services, adoption rates have exceeded 18% of Orange's total installed subscriber base. Although current applications focus exclusively on infotainment services such as news, stocks, horoscopes and cricket, the OnMobile system is now generating more than 200,000 minutes of use per month. E-mail and dialer services are planned for deployment in the first half of 2002. The system's unique interactive sports application deployed for cricket has proven to be a great success with subscribers who cite its ease of use and value as key to their adoption.



## NewsFlash

**SenseStream Limited**, a Hong Kong-based software product company providing wireless Internet infrastructure solutions, has acquired **Innaworks**, Asia's leading developer of wireless services deployment platforms. SenseStream has gained control of all Innaworks' intellectual property rights and assets.



**Webraska Mobile Technologies SA** and **Parrot** have joined forces to launch a telematic solution that combines distributed navigation on Pocket PCs with Bluetooth™ hands-free mobile telephones. Users will be able to access turn-by-turn directions, real-time traffic conditions as well as a broad portfolio of location-based services from their PDAs.

**Webraska** has been awarded the European patent for **IbDN®** (Internet-based Distributed Navigation®), server-based, real-time, turn-by-turn navigation and fleet management solutions on wireless PDAs, car radios and other embedded terminals.

## ARGNOR INVESTMENTS

Argnor Wireless Ventures has invested in

## Digital Route AB,

a leading convergent mediation software vendor based in Stockholm, Sweden. Digital Route has designed and developed an innovative billing mediation product, Mediation-Zone™, which offers a single platform to support the diverse needs of communication service providers, regardless of their network structure. [www.digitalroute.com](http://www.digitalroute.com)

**new investment**

## Exit

## PayPal Inc.

, provider of instant and secure online payment service has launched its initial public offering of 5.4 million shares of its common stock at \$13.00 per share. Shares of PayPal soared following the company's initial public offering. They are one of the first internet companies to make an IPO since the dot-com crash almost two years ago. In their IPO filing, Paypal also stated that they want to grow their share of the online small business market, which presents a significant opportunity. After expenses, the IPO will generate more than \$61 million for PayPal's operations. Following Paypal's success many internet companies have followed in their footsteps and filed for IPO's.

## CLUSTRA SYSTEMS INC.

Sun Microsystems Inc. has acquired Clustra Systems Inc., a leading developer of high-availability clustering technology. The Clustra technology will enable multiple software products from Sun, such as the iPlanet Application Server and Sun Open Net Environment, by delivering a unified, self-repairing, massively scalable web services software platform. "This technology is a perfect match to help Sun achieve its three big bets: massive scalability, continuous availability, and an integrated software stack" said Gary Ebersole, Senior Director at Sun Microsystems and former CEO of Clustra.

**Hyperchip Inc.** secured \$70 million in its fourth round of financing, which includes a \$50-million loan from Investissement-Québec. Hyperchip is preparing to commercialize its carrier-class core router that scales from tens to millions of gigabits per second of capacity.

**Alice Systems**, which simplifies the use of applications like email and access to Internet/Intranets over GPRS and 3G by its laptop and PDA-based software clients, has received funding of 3.3 million Euro from Argnor Wireless and ACR Capital. This investment is the second funding of Alice Systems, complementing an earlier 2.5 million Euro investment in 2001 by Argnor Wireless Ventures and Northstream. The new funds will mainly be used for international marketing and expansion.

**TelesensKSCL** and **Panafon Vodafone Greece** have signed a contract worth † 1.9 million that will see Telesens KSCL upgrade the functionality and flexibility of Panafon's billing infrastructure. At the same time, Vodafone Albania announced that it will become a client of the Panafon Services Bureau, which supports customer care and billing on an outsourced basis for third-party network operators using TelesensKSCL's Jupiter billing solution.

**12snap AG**, a leading European mobile marketing company, announced its partnership with **Empower Interactive Group Ltd.**, a wireless data and messaging infrastructure developer. Empower's Messaging Service Platform will be used to manage 12snap's SMS traffic.