

Eastern Europe On Its Way by Dr. Volker Ziegler, President, Mobile Solutions at Siemens **Abstract**
Mobile services are among the most dynamic sectors - close behind Western Europe - of Eastern Europe's telecom industry. Mobile users will access e-mail, videoconference with their banks and shop via phone while waiting for a doctor or be informed of cancelled and alternative flights. Mobile multimedia, messaging service (MMS), with text, music and video, will facilitate the seamless integration of personal and professional life. MMS appeals especially to younger users, but even businesses would pay 60-80% more for multimedia and data.

In recent months the market for mobile data services has become more dynamic. The mobility boom is far from being limited to Western European countries: In Eastern Europe, mobile services are one of the most dynamic sectors of the telecom industry. The region's leading countries - the Czech Republic, Hungary, Slovakia and Poland - are only a few steps behind their Western European counterparts. Accordingly, Pyramid Research expects that by the end of 2005, the total number of mobile subscribers in Central and Eastern Europe (CEE) will exceed 50 million and mobile Internet accounts will constitute approximately 21 per cent of all mobile accounts. This comes as no surprise, since the new packet-oriented broadband transmission technologies GPRS (General Packet Radio Service) and UMTS (Universal Mobile Telecommunications System) will permit a wide variety of new mobile multimedia and Internet services in the very near future. As a result, more and more providers are entering the market with different applications that are designed to make life easier, both for private and business users. Users of wireless applications and services will benefit from increasing personal freedom and mobility. For example, people will view their most important e-mails via mobile devices on the way to work, process these as appropriate, clarify personal financial matters with the teller at the bank via mobile video conference, or do the weekly shopping via mobile phone while having lunch in the cafeteria or sitting in a doctor's waiting room. So-called "mobile push" services inform travellers actively about last-minute changes in travel plans, or cancelled flights for example, and suggest alternatives. In the post-industrial age private life and professional life is increasingly seamless and integrated. This generates significant demand for mobile applications and content to help people get through the day with the needed flexibility.

Flexible Leisure and Work Schedules

The idea that one single application will turn out to be the killer application seems unlikely. Instead, there will be a whole portfolio of customer-oriented applications based on various generic basic services - such as e-mail access, multimedia messaging, or video streaming. As bandwidth increases, mobile communication increasingly is mobile multimedia communication. What is more, successful multimedia applications will typically include, say, messaging, payment and location-dependent components.

There has long been quite a bit of evidence that the demand for wireless multimedia streaming applications would grow enormously, but possibly only when fully blown UMTS networks are ready. However, the momentum that this topic has already developed comes as somewhat of a surprise to the whole industry. Demand for mobile video and multimedia communication seems to be taking shape in most countries of Eastern Europe. This is due to the fact that these modalities offer a variety of different uses - including entertainment and advertising, news and sporting events, business television, and video conferencing. Providing this data via a wireless connection would make leisure and daily work schedules much more flexible. Companies could add impact to their advertising messages with digital

graphics and send them to the mobile devices of their customers via multimedia messaging services (MMS). Headquarters could send relevant design drawings of a machine to be repaired to field representatives at the installation site. Therefore, it is more than likely that the mobile transmission of compressed image and sound files will soon become a well-established use of the GPRS standard.

User-Friendly and Versatile Services

SMS is one of those lucky accidents whose technological possibilities exactly match customer needs. However, the huge success of this service was not really anticipated when the short message service was conceived. Today, now that the business potential of multimedia messaging services has been recognized, it is expected to cause an enormous jump in the quality of mobile communication. MMS not only sends texts, but also transmits short melodies, small images to a mobile phone, and even multimedia sequences of any size. Since no further user intervention is required to read, view, or listen to the message, this service is enormously user-friendly and versatile. However, analysts may have overlooked some of the striking similarities between SMS and MMS that are prerequisites for MMS to replicate the SMS story of success: namely, integrated pricing for services which is transparent to the user, interoperability between different handsets and a simple operator / content owner business model. If the industry seems ready to leverage their SMS experience and provide MMS in a way that triggers a quantum leap in the quality of mobile communication.

It is not only because the use of MMS will be as easy as child's play that it might become as popular as SMS. It is because, for the third-generation mobile telephone, mass-market entertainment has such an enormous potential. Market surveys show that there is already significant demand today for mobile entertainment solutions - from multimedia offerings and video streaming to interactive games. It is, especially, the younger generation of mobile telephone users that wants such offerings. According to the Taylor Nelson Sofres market research, 30 per cent of existing mobile phone or Internet users in Eastern Europe aged under 24-expressed high interest in 3G wireless data services.

It is not only this market survey that shows there is interest in such services, but also practical experience. At last year's Oktoberfest in Germany, the world's largest funfair, Siemens mobile, for the first time, offered users a mobile photo service free of charge. Thus visitors to the Oktoberfest were able to send their digital portraits via mobile phone to any e-mail address directly from the beer tents. In the future such services will become more and more important, since they are not only informative, but can also convey the emotional context of an event using mobile communications. They enable users to record, visually, what they were doing at any time and at any place. For instance, at family events such as weddings, even relatives who cannot be there can share in the emotions of the wedding couple - digital snapshots of the "I do" could be sent to them in real-time via GPRS or UMTS. This is a gain of personal freedom. It is no longer so much the conservation of memories and images, but rather the ability to share information, situations and feelings with others directly and immediately. Teenagers in Western Europe, especially, have accepted SMS enthusiastically. They are likely, also, to see tremendous value in the next stage of mobile data communication, which will permit downloading and sending small video clips, images or songs in a personalized way. Mobile services such as SMS have, as well, become one of the most dynamic sectors of the wireless industry in Eastern Europe. High mobile penetration levels can already be found in Russia, Poland or Hungary for example. Many multinational operators now realize the great potential of the Eastern European Market and have already launched

GPRS services in countries like Croatia, the Czech Republic, Poland, Russia or Hungary.

Conclusion: Wave of Success

Currently there is some question as to how fast GPRS and UMTS will really lead to new business opportunities. A Siemens survey indicates there is great business potential resulting from the spread and acceptance of new wireless data services in Eastern Europe. For example, the Siemens service for mobile charge card recharging, the Money Beamer, is already being used successfully in the network of the Czech mobile operator Oskar. Thanks to Money Beamer, prepaid customers can choose to credit their mobile phone via WAP, SMS or using the PC via the Internet. Based on our experience, mobile operators in Eastern Europe are primarily interested in multimedia messaging, video streaming and location dependent services such as fleet management. The idea of mobile ticketing is particularly popular in Russia. A Siemens survey showed that private users in many parts of the world would be willing to pay mobile telephone fees 60 per cent higher than the amount they currently pay to be able to use new multimedia and data services. Furthermore, the survey shows that business users would even pay 80 per cent more than they currently do for advanced mobile telephony services - assuming that the new services meet their requirements and needs. Therefore the success of the second and third generation of mobile telephony and the associated services depends primarily on the quality of cooperation among network operators and service providers, application developers and content owners. Since we know the key factors of success of GPRS and UMTS are clearly correlated with the availability of attractive applications and content, it is up to us. Let's make it happen!