



# Mobile Market Insights

November 2007  
Issue 11

Ericsson Turkey

## Special Topic

- Convergence

## Convergence—Key Messages

The pace of network convergence is accelerating. Operators from all continents are now embracing the opportunities created by merging fixed and mobile networks into a converged next-generation network (NGN). IMS (IP multimedia subsystem) is universally accepted as the key enabling technology to achieve this.

Systems convergence is a win-win game. Systems convergence is an essential part of any NGN programme and in driving out costs through both simplifying and automating disconnected tasks and processes. However, systems convergence also enables the launch of new convergent services, so it is a win-win situation.

Converged services are flooding into the market. We believe service providers have just scratched the surface in this area and we expect them to launch a lot more over the next few years by blending access technologies and services.

The adoption of convergent services is increasing in pace in the consumer, enterprise, and public sector segments. The ability to offer convergent services is one thing, but being able to sell them to customers is another. To date, telcos have found a sufficient number of customers among technophiles, but mass marketing of these services is a problem. This will require new marketing techniques and approaches. So far, there is little evidence that telcos have sufficiently addressed these issues.

Sector convergence is

happening apace as adjacent segments covet the revenues of their neighbours. Whilst some revenues from one segment have trickled across into adjacent areas, the fixed telecoms, mobile telecoms, IT services, content providers and media service providers have been largely discrete industrial sectors. This is no longer the case. Evidence from Europe, North America and Asia points towards the convergence of these sectors, although not necessarily for every company in these sectors.

Convergence will transform the telecoms market for customers, operators and their suppliers and will indelibly change the established relationships within the market. Telcos are central to the relationship between demand and supply and have to adapt to the demand by driving supply to meet their changing needs. This has caused some dislocation (for example, Marconi) and is likely to do so again in the future. However, this supply chain must adapt if it is to stand up to the challenge from the new operators and suppliers.

Convergence increases complexity. The opportunity to mix voice, data and video in the same session using different networks (mobile and fixed), multiple services (voice, instant messaging and video streaming) and on different devices (mobiles, PCs and TVs) will be beyond all but the most avid enthusiast. So most customers - both consumers and enterprises - will need help.

Enterprises want help to apply the capability enabled by

convergence to their business. This means they do not just want components in the form products provided by the telco, but solutions that enable their business to be more efficient or compete more effectively. A good example of this is the solution that AT&T provided to Talx, mentioned earlier. Talx derives value from the cost savings on its existing operation and its increased ability to drive new revenues from its customers because of the increased efficiency of its operations. Convergence of networks, systems and sectors begins to make the delivery of solutions rather than products more likely rather than less, albeit becoming more complex as a result.

Consumers want to communicate using whatever device suits them, with location being a key factor in this. At home they will use the mobile, fixed line or PC depending upon their preference. TV addicts may choose to do so from their sofa whilst watching their favourite programme - a programme they may have accessed through IPTV. How they communicate is also a matter of choice - some will use voice, others email; younger people tend to use text and IM. Convergence at a services level facilitates this. So, convergence is both enabling and changing what customers want from the operators as their suppliers.

Source: Ovum

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## One Step Closer to Convergence

Unlicensed Mobile Access (UMA) is a technology that enables mobile subscribers to make calls using their own WiFi or Bluetooth systems. UMA has recently been incorporated into the 3rd Generation Partnership Project (3GPP) and is proving to be a stepping stone towards full fixed-mobile convergence.

Roaming between mobile networks and fixed wireless networks using UMA technology is interesting for fixed-line operators because it enables them to bill for calls originating on unlicensed spectrums of the fixed-wireless network.

The original specifications were developed by the UMA group, which included suppliers such as Nokia, Ericsson, Motorola, Nortel, and Siemens. Ericsson has run UMA trials with several operators, including

TeliaSonora, Vodafone and British Telecom. BT has already launched its BluePhone product and BT Fusion service while several other operators are planning on launching UMA services. Ian Livingston, CEO of BT Retail, said in The Register: "We know that many of our customers enjoy the convenience of their mobile phones when they're out and about but switch to using a landline phone when they arrive back home to save money or because they have little or no mobile coverage." The specifications for UMA are now covered by the 3GPP and will be included in their next release, version six.

UMA is not actually a product but a standard which allows for the handover of mobile voice and data to a wireless local area network (such as WiFi or Bluetooth). It works by allowing a mobile subscriber with a UMA-enabled, dual-mode handset, to connect to an unlicensed wireless network when he/she moves within a certain range. A

UMA network controller then authenticates the handset and allows access to GSM or GPRS services on the fixed-wireless network.

A more complete convergence of fixed and mobile networks will be achieved when IMS (IP Multimedia Subsystem) is fully rolled out in the networks. This will introduce IP as the universal protocol that all services will run on. But, because many operators are still focused on delivering voice over circuit-switched networks, this level of convergence is still a long way off. Therefore, UMA functions successfully as an initial trial for fixed-mobile convergence.

Source: Ericsson



## Operators' Needs Drive IMS Standards

The IMS standardization process started nine years ago with an initiative from AT&T Wireless and British Telecom, and Ericsson was engaged from the start.

Jörgen Lantto is currently head of systems management at the Ericsson business unit Multimedia where securing the establishment of IMS services is a priority. But in 1999 he was employed by Northstream, which was heavily involved with a new all-IP standard that later became IMS.

He says: "It all started when a major operator in North America decided to go for GSM. Initially they did not want to deploy a new GSM circuit switched network; instead they wanted to deploy a common IP-based network for both data and voice. So initially the main driver was to create a mobile standard for VoIP over 3G and EDGE. Ericsson, Lucent and other players in the market then started a joint collaboration to set a common standard, called 3G.IP."

The work in 3G.IP was soon

transferred to 3GPP (3rd Generation Partnership Project), and in record time the IMS architecture was agreed upon in 3GPP. At this time the industry had agreed that the standard should not only support VoIP but also multimedia services based on IP. And so the IP Multimedia Subsystem (IMS) was founded.

Since then the work with IMS has continued to progress. But to create a system that supports multimedia services both within the mobile and the wireline networks, regardless of the terminal used, has been a bigger challenge for the industry than simply creating a standard. Ericsson has put a lot of effort into making all these pieces come together - the standard, customer needs, technical challenges in mobile and fixed networks, and new services.

The most popular IMS services have been Voice over IP and IP Centrex solutions, mainly for broadband operators. But by the end of last year, SoftBank, launched a commercial IMS offering in Japan using Ericsson's IMS system. With the help of Yahoo!, the operator's

subscribers now have a mobile community, with the chance to chat and to enter a virtual world.

Lantto says: "I think we will see many more mobile communities coming, and the next step will be IPTV. The future will be an all-communicating world, where all services, TV, mail, chat, phone calls, surfing - whatever you need - should be accessible regardless of your terminal. IMS can make that happen, and at the same time, provide for business solutions so the operators can have control of the services provided by their networks."

Lantto adds: "It is a challenge to create ecosystems to make this work. Within the next year, there will be more terminals supporting the standard. We are now working on a set of services that we call Multimedia Communications Suite, MCS, and feedback from both terminal vendors and operators is very positive. Ericsson has taken a leading role also in this work, once again in close collaboration with the operators."

Source: Ericsson



## When TV and Internet Merge

A rise in broadband use coupled with content digitization creates new ways to distribute and consume media. In this context Redback's SmartEdge creates opportunity for consumers, media companies and operators.

Analysts predict that the current global figure of 247 million broadband subscribers will increase to 400 million by 2009 and that mobile broadband will become a larger part of this growth trend. The innovative IP technology in Redback's SmartEdge product family forms the basis of the multi-access edge platform in Ericsson's Full Service Broadband offering.

Apart from the fact that consumers will have access to a larger number of services for voice, video and data, the key word is interactivity. Arpit Joshipura, vice president, marketing standards and solutions at Redback Networks, says: "Vision on any screen, anywhere becomes a reality where video moves from broadcast TV to internet video on demand, content creation moves from Hollywood to home and content distribution and storage moves from devices to global internet."

Regardless of the access method, the SmartEdge platform

ensures that the correct network and quality of service are applied to all users. The technology will make a cable TV service as portable as a cell phone service, and it will be possible for a subscriber to watch a favorite TV-show from the beach instead of the living-room. Another change from today will be that end-users can be reached by TV advertising specifically targeted towards a defined group, in the same way banners currently target specific groups on the internet. How TV habits will change in the long run is, of course, impossible to predict, but they will certainly change as new services and formats emerge.

For media companies, such as TV stations, two characteristics of the SmartEdge platform are of specific importance. First, on demand and VOD (traditionally unicast traffic) and IPTV/broadcast traffic can be seamlessly offered on the same network, allowing TV stations to compete cost effectively with cable and satellite companies. Secondly, it will be possible to differentiate different target groups. Since IP intelligence is distributed in the network along with peer-to-peer control and security, tailor-made advertising for specific target groups, as well as local content, can be inserted easily and efficient.

Fifteen of the top 20 operators such as AT&T, British Telecom, France Telecom, Telefonica, China Telecom and Korea Telecom are using the SmartEdge multi-service edge router for providing both residential and business services. French operator Neuf Cegetel used it to expand geographic coverage and increase network access speeds. In addition, the advanced service creation capabilities and extensive protocol support on the SmartEdge platform helped the operator to reduce the time to market for new business services while leveraging existing infrastructure.

"A single multi-service platform allows a service provider to create a simple, flexible next generation network that is ready to run residential triple play services (voice, video/IPTV and internet), business services and mobile broadband off the same IP edge." Joshipura says. Due to this simple consolidated approach, operators have realized up to 50 percent savings in capital and operating expenditures and have increased new services revenue.

Source: Ericsson



## Mobile Web Use Increasing

The number of users accessing the web through their mobile phones is growing steadily and may someday surpass the number of users accessing the web on fixed PC connections.

Erik Kruse, senior consumer behavior expert for Ericsson ConsumerLab, says that while there is more content available for fixed internet users, industry observers can expect the number of people getting on the web with their mobile phones to increase.

"Growth in mobile internet usage is being fuelled primarily by the improvement in handset screen size and download speeds and also - particularly in Asia - by the growing number of people using their mobiles to, for example, make purchases," Kruse says.

Traditional downloading of ringtones, wallpaper and instant news has driven mobile usage, while features such as YouTube and video have fuelled fixed

internet usage.

Users have traditionally preferred to do heavy duty work on a fixed PC connection, primarily because of screen and keyboard size. If, or when, mobile phones match the capabilities of computers, it may still be tough for this generation of users to change habits and switch to a mobile-based platform for all their work.

But observers such as Kruse contend that such an argument may be irrelevant. New applications and business models, such as the use of mobiles as a method of payment, are being envisaged and created every day.

"Certainly there is more content available on fixed internet, but sooner or later we can expect that to change and much of that has to do with the growth of things such as mobile internet advertising and other new business models," Kruse says.

The mobile web is at an early state of development, Kruse says, but mobile web usage is expected to grow as phone performance improves, sites optimize their content for the small screen and operators fine-tune their tariffs, enabling mobile phone users to take advantage of mobile phone capabilities and convenience.

In the US, the Weather Channel has a greater reach via the mobile web than it does via PC-based internet, highlighting the success of sites that provide content for people on the move by optimizing their content for the small screen.

"The advantage that weather, sports and news sites have over other mobile websites is that they provide up-to-date information that consumers need quickly, anytime and anywhere," Kruse says.

Source: Ericsson



## Multimedia En Route

It really is multimedia in motion. The New Zealand company Eyemagnet recently landed a deal to bring BusTV to Brazilian bus passengers; via installed screens commuters will be able to watch interactive video advertising while riding around the bustling streets of South American cities.

São Paulo alone has 18 million people," says Eyemagnet Director Paul Treacy. "They will be able to receive information, discounts and other offers while travelling on any of the city's 35,000 buses."

Eyemagnet, a screen technology and infrastructure company, is licensing its solutions to Caio Industries, which builds and supplies buses across South America. On its new, bio-diesel fleet of buses, Caio is already installing the advertising and information display screens – managed and controlled over the Brazilian mobile phone network.

BusTV is delivered as a store and forward technology, synchronising promotional data with central servers using the mobile data network. It displays content on specific bus routes and at a specific time. The system also utilizes SMS for customers to interact with individual screens.

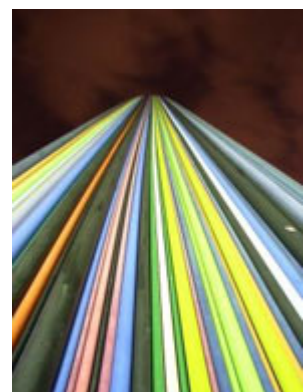
The passenger sends a short code by text message to the number on the ad on the display screen and receives, for example, a voucher, a bar code or an image to be redeemed or used in places such as retail stores, super markets or theaters. For now, the ads are unique to the scheduled route of a particular bus. The next step is to use GPS to localize and customize the content even further.

"Say someone gets off a bus next to a shoe store everyday. We would be able to display ads from that store in time for the passenger to send a text message and receive a voucher

for that store before it's time to get off," Treacy says.

Eyemagnet has confirmed connectivity, through its Brazilian SMS partner Cyclelogic, to all of the South American mobile operators. Bus passengers do not have to sign up for the service, which will continue to be based on text messaging. The only limit, Treacy explains, is what the mobile handset can do.

Source: Ericsson



## Mobile Activism Gains Ground

Mobile services are increasingly becoming an important part of civic engagement. Political parties and non-governmental and charitable organizations are all embracing mobile technology as a way of reaching broader audiences.

The use of mobile technology in society is a unique and powerful opportunity for organizations that rely on civic engagement and grassroots activism. The City of London recently used a text-based call-to-action to advertise an Indian heritage celebration while SMS usage increased 40 percent as a result of activist campaigning during the 2004 national elections in Spain.

Mobile fundraising is also an invaluable method for charitable organizations to reach out to their members and donors. UK-based Incentivated has helped several not-for-profit organizations use mobile phone technology to solicit and collect charitable donations.

Jonathan Bass, managing director at Incentivated, says mobile services are a superb way to get an initial conversation going in civic-minded campaigns. "It brings in spur-of-the-moment donations when people are in a giving mindset," he says.

Most recently, the company helped The Children's Society in the UK raise about USD 10,000 during a one-day concert for disadvantaged and at-risk children. Of the 10,000 people who attended the concert, which included a performance by rock-legend Iggy Pop, 1,200 fans chose to donate money by sending premium-rate text messages.

According to the not-for-profit Creative Commons, the most successful mobile fundraising event to date was the July 2007 Live 8 concert in London, England. During that event approximately 2.1 million text messages were sent raising USD 5.4 million for Live 8-related projects.

Bass says that the more common

way civic-minded organizations use mobile services is to complement ongoing campaigns. For example, the Labour Party in the UK has purchased a short code via which donors can make contributions using SMS at any time.

Bass says that many charities have seen that the medium works but will not put their marketing resources behind it until operators' fees come down. "Mobile networks are starting to understand that they can't treat donations as they do other content," he says.

In 2004, after the Asian tsunami, operators in the UK made an exception and collectively waived the fees for premium SMS. During that campaign, more than USD 2 million was donated via SMS in the UK alone.

Source: Ericsson

## Digital Divide

World leaders have recognized that the technology gap – the so-called 'Digital Divide' – between the world's richest and poorest nations is a symptom of wider inequality. However, technology is also recognized as an enabler to close the gap – in economic, social and political terms.

Real-life examples from all corners of the developing world show how mobile networks are providing voice and data connectivity that can improve billions of lives.

Not dependent on foreign or state aid, mobile services are being run by operators as sustainable, profit-making businesses. They are helping to boost local economies, deliver important social services like healthcare and education, improve democracy and generally raise standards of living.

The statistics speak for themselves. With three billion mobile phones already in use, and network coverage extending over 80 % of the world population, mobile

communications is the best tool to use in bridging the Digital Divide.

There are still barriers to the roll-out of mobile communications for all – the price of the services themselves, the cost of ownership for operators and the complicated issue of government subsidies, regulation and taxation. But the development of affordable handsets, more efficient network equipment, new business models and a more enlightened government approach to the telecoms market is bringing down the barriers to universal mobile communications access.

What is more, the future looks exciting. Whereas much of the developed world is still relying on the 100 year-old fixed-line telecommunications network to deliver many of its broadband Internet services, emerging markets are set to leapfrog using a raft of new mobile broadband-based technologies.

Broadband communications may be revolutionizing the way

people work and spend their leisure time in the developed world, but the fixed-line, PC-based approach that is prevalent there is far too expensive for most people in the developing world to consider. In many of these countries the cost of an hour's Internet access exceeds the average daily income.

While mobile phones do not have the rich functionality of a broadband-connected PC, they are more suited to life in the parts of the world that ICT struggles to reach. They are cheaper and easier to use, they don't need a regular power supply and can be used by people who don't have a previous experience of technology. They have all the voice and data capabilities needed to bring people into the digital society.

Many countries in the developing world are pioneering new mobile applications and services that are improving the lives of millions of people.

Source: Ericsson



## Paving the Way for IPTV

Telecom operators are looking for integrated IPTV solutions for the entire network, all the way to the home. The ability to offer end-to-end solutions is therefore crucial for suppliers.

IPTV is now on the threshold of becoming a mass-market service. Standards, performance and scalability address the issues of cost and risk that have held the market back so far. The telecom industry is now in a position to aggressively launch TV services in addition to their current offerings. And for the telecom industry, IPTV is more than just TV over IP; it will eventually become an interactive and personalized TV experience. In contrast to traditional terrestrial and satellite broadcast TV, telecom networks have a real two-way communication option - a prerequisite for interactive and personalized TV - at their disposal.

The road to IPTV mass deployment is a bumpy one, mostly because of the many technologies and standards that crowd today's market. A new group of systems vendors, operators and consumer electronics wants to speed up worldwide adoption of internet-based television services.

As the head of broadcast solutions innovation at Telecom Italia, Gabriele Elia has a keen interest in seeing IPTV succeed. Telecom Italia, Italy's biggest fixed-line and mobile operator, began trialing IPTV in 2004, launching the service commercially in December 2005. The service is now available in more than 20 cities.

But Telecom Italia believes that it will take less expensive systems and a large ecosystem of IPTV content producers to ensure true commercial success.

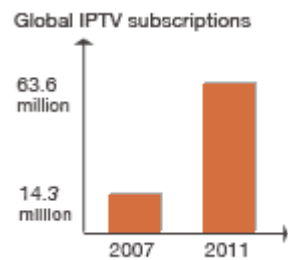
So Elia joined the new Open IPTV Forum to help spearhead uniform standards for the network and consumer equipment used to deliver IPTV. Such standards, he hopes, will

end fragmentation and help the global market grow large enough to push down prices and entice content producers to deliver better products.

"Our users can't interact with users in France or Spain, and a European editor at, say, CNN cannot move content from one country to another," Elia says. "We feel this problem of interoperability raises costs and slows IPTV's success."

### TARGETED LAUNCH: 2008

The Open IPTV Forum, announced in March, was founded by Ericsson, Sony, AT&T, Telecom Italia, France Telecom, Panasonic, Philips, Samsung, and Nokia Siemens Networks.



While regulatory bodies are already addressing certain elements of IPTV, members of the group want to address all specifications - from the network to the IPTV set-top box. The proposed technology will be trialed and, if all goes well, launched commercially in 2008.

The fact that companies that normally compete for business have joined forces says something about the importance of IPTV for the telecom industry.

At the end of 2006, there were 3.6 million IPTV subscribers worldwide - two-thirds of them in Western Europe, according to a recent report by Canalys, a UK-based technology research firm. Together, these customers generated nearly EUR 1 billion in annualized service revenues, Canalys reported.

### GROWING MARKET, FEW BIG PLAYERS

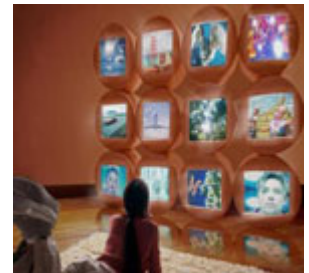
2006 was the year when most major incumbent operators launched IPTV, says Nadia Griffiths, an IPTV analyst at Canalys.

The market is highly fragmented, however, with most new entrants still only serving a few thousand subscribers. As a result, a handful of operators controlled most of the IPTV market in 2006, Griffiths concluded in a recent report.

The three biggest providers were Hong Kong-based PCCW, with 18.2 percent of world-wide market share; France Telecom, with a 16.8 percent share; and Free Telecom, also based in France, with a 14 percent share.

But as long as viewers experience frozen screens, pixilated images, or delays when switching between channels, it will remain difficult to convince consumers to switch en masse from traditional broadcast television, Griffiths says.

Consumers also want to access content and services across multiple platforms operated by different providers. This can only be possible when a set of open



#### Telecom Italia at a glance

**Market**  
Italy, France, Germany,  
the Netherlands, Brazil

**Business**  
Fixed-line and mobile  
telecommunications,  
broadband

**Subscribers**  
32.4 million mobile lines,  
24 million fixed lines,  
6.8 million broadband  
connections

**2006 revenues**  
EUR 31.27 billion (USD 42.54)

**Founded**  
Early 20th century as  
incumbent Italian telco

**Owners**  
Private and institutional  
investors

technology standards is established, she says.

## Personalizing the Mobile Internet

Mobile internet success is dependant on giving end users the personalization they demand from the internet combined with the benefits of the mobile context.

The mirror inlaid in the cover of Time magazine's 2006 person of the year issue has immortalized Web 2.0. YouTube, MySpace, Facebook, Twitter, Blogger, and Second Life are all concrete online spaces where people create their own content. Internet users are no longer happy as passive consumers of information and as observers of life outside of their real-world network. They are creating, self-publishing and expecting feedback. This is Web 2.0.

The move of Web 2.0 into the mobile space is shaping the use and expectations of a generation of future business customers. In a recent report Sabine Ehlers,

an analyst at Berg Insight writes: "These days, to not know and keep up with what happens on the mobile scene is an oversight that no one, basically regardless of business, can afford."

The report, Mobile Internet 2.0, says that mobile internet winners will be the players that not only give people what they expect from the internet today, but capitalize on the added value brought by mobility. Today's mobile internet providers are expected to offer internet browsing, email, IM, media and social networking. Mobility adds context, in the form of location, personalization, and immediacy.

"The western mobile internet user is also a heavy user of fixed internet, shaping behavior and expectations on services and interfaces," the report states. "However, mobile surfing is not

a replacement activity for fixed access, but rather a complementary channel with a different user experience and context."

Facebook's mobile site lets users view their home page, update their status and receive SMS alerts of their friends' activities. The real key for all social networking mobile internet sites will be to find the mobile context that gives users more than simply a connection to their networks.

Ehlers writes: "To the web 2.0 generation, the business customers of tomorrow, mobile internet is not a conceptual and futuristic abstraction but an expected staple tool in the infrastructure of their lives."

Source: Ericsson



## In-game Billing and pay-per-play Boost Gaming

Multiplayer and connected gaming is becoming increasingly popular and much of that is because of an innovative in-game billing plan, which is enabling new pricing models such as subscription, rental and pay-per-play.

Terraplay in Sweden has become well known for mobile gaming and has found that that in-game billing is especially lucrative.

Sven Hålling, Terraplay's CEO, says that a large share of the mobile subscribers in Terraplay's target audience are on prepaid plans, and the average prepaid customer has just a few Euros on the prepaid account.

"So we are shutting out a large number of potential users, because they can't buy a game for Euro 5, even if they wanted to. But if we change payment models to a free download, and then ask the user to pay smaller amounts every week or every time they play, then we open up a new market that could previously not buy games. Also,

if a user is disappointed by one game, he / she has not lost that much and will try another one instead. We will change consumption patterns, and we will get more satisfied users that play more and, in the end, make more than just the occasional 5 Euro purchase," he says.

A recent survey issued by market intelligence firm iSuppli, and cited in the newsletter FierceMobileContent, forecasts the number of mobile gamers will reach a global total averaging 134 million users per month by 2010, more than tripling the 38 million average measured in 2005.

Hålling says that his company has been able to introduce new and innovative flexible billing models providing a community game zone using the Terraplay Global Gaming Network. "This should make it easy for our content providers as they only need to adapt their games once. We hope that many other operators will join as soon as possible to grow the gamer base even further," he says.

Terraplay is known for its Global Gaming Network, which is built on the MOVE technology platform. The platform can be easily adopted by developers, game publishers and operators. It includes support for in-game billing, multiplayer, games communities, and content shop / download. Terraplay runs complete games community sites for mobile operators and delivers advanced gaming middleware to publishers to help them create greater connected experiences such as multiplayer, competitions and buddy lists.

In 2006 Terraplay won the ME award for "Best Games Service Provider" and has been nominated again in 2007.

Terraplay works with most of the leading games publishers, including Glu, Hands On Mobile, Player X, THQ, Oberon, I-play, Digital Chocolate and others. It also works with some of the biggest operators, including T-Mobile, 3UK and South Korea Telecom.



## Time to Decide on Broadband for All

Upcoming regulatory decisions on radio spectrum allocation will have a profound impact on global telecommunications and the availability of mobile broadband services for years to come.

Providing broadband access is a key priority for many governments around the world. The socio-economic benefits are well documented. Broadband helps provide access to a wide range of community services, such as healthcare and education, as well as information and entertainment while stimulating entrepreneurial activities.

By 2012, there are expected to be about 1.8 billion broadband subscribers globally, with around 70 percent on mobile networks. The unprecedented demand for mobile broadband services means additional radio spectrum is critical. The International Telecommunication Union estimates that the current amount of spectrum may need to be doubled or even tripled to handle demand up to 2020.

Radio spectrum is a limited resource and in order to manage international

spectrum use, a World Radiocommunication Conference (WRC) is held periodically to decide on the regulatory framework. The next conference, WRC 07, is scheduled to take place in Geneva, Switzerland, from October 22 to November 16 and will consider spectrum allocation typically implemented beyond 2015.

The decisions at WRC-07 will therefore have significant implications for the telecom industry and its ability to provide broadband to many under-served groups. Granting additional spectrum in the sub-5GHz frequencies will enable mobile broadband services in a cost-efficient manner and, if harmonized globally, will ensure roaming and economies of scale in network equipment, devices and services.

Low frequency spectrum, such as the 470-862MHz band, is needed to enable cost effective rollout in rural areas and to give improved indoor coverage in built up areas. Broadband over mobile networks is often the only way to quickly and conveniently reach those in remote areas. Australia's Telstra is a good

example, rolling out broadband access with WCDMA/HSPA to more than 98 percent of the population in less than 10 months.

Higher spectrum bands, like the 2,300-2,400MHz and 3,400-4,200MHz bands, are needed to provide extra capacity in densely populated areas. This is vital because more traffic is already generated by data and information-based services over mobile networks than by voice, with mobile broadband traffic expected to grow at least 30-fold by 2012.

Allocating new spectrum bands for mobile services at WRC-07 is an opportunity that should not be missed, especially as it typically takes a decade between the identification of spectrum and actual commercial use. It would pave the way for the next generation of mobile services and enable broadband to reach a wider public, bridging the digital divide between rural and urban areas - and making it affordable to all.

Source: Ericsson



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