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# Telecoms Predictions 2006



## Atos Consulting Telecoms Predictions 2006

### Introduction

The European telecommunications landscape is undergoing a revolution that is transforming the industry. The voice market is now all but flat and fixed-line operators are struggling to maintain revenues in an environment where voice minutes are being offered free by many. It's a consistent theme across the mobile world too where competition has increased to such a degree that operators have been forced into a price war to try and win and keep new customers. ISPs face many of the same challenges with a market characterised by fierce competition but with broadband now more accessible to both home and business users, telecoms companies are looking to capitalise on this and drive new revenues.

It's been a tough couple of years with an emphasis on dramatically reducing capital and operational expenditure. The market is now characterized by the need to grow revenues by creating a service-driven environment and so the focus lies fairly and squarely on that most precious of commodities – the customer.

Network convergence and consolidation has initiated a surge of technological innovation with many operators heavily backing a triple-play model. The knock-on effect of the emergence of a converged audio, video and data offering is that telecoms companies have been forced to look carefully at what customers really want and, crucially, how to tailor, package and service a consolidated offering according the individual needs of each customer – no mean feat.

What's clear is that, for telecoms companies, 2006 will see the emergence of the **customer-centric environment**. Operators will be focused on creating a single customer view that will help them understand the needs and desires of each individual customer and therefore develop host of value added services to keep customers inspired and loyal. The buzz phrase will be excellence in customer service and so the market will see the emergence of smarter service models including consolidated billing systems that will tie offerings together and make buying services quick and easy.

This report identifies some of the key trends for 2006 and seeks to give an insight into how telcos and service providers need to redefine their business models to capitalise on upcoming opportunities and therefore improve revenues in an extremely competitive environment.

### **Three main areas:**

## **VoIP and IP Services Top Five Trends**

### **1. IPTV**

IPTV really is the next big thing. In a bid to pull themselves out of a rapidly shrinking voice business, telcos have one major hope: Internet Protocol Television. IPTV promises a radical shift in the way people buy voice, data and video services and therefore re-energised revenues as content providers clamour to create products and services to make IPTV market-ready. European and Asian companies, in particular Italy and China, are leading the way in development of this critical new technology and so, for European telcos, there is a huge opportunity to be in the vanguard of this potentially revolutionary innovation.

IPTV development is still in its infancy, however. A few technology companies have developed products ahead of the game and in preparation for the first big deals to be done; Microsoft's Media Centre being the most obvious. But there is no fully-fledged strategy for roll-out at present and, some would argue, little real understanding of the drivers and demand for IPTV.

What the market can expect to see is the rollout of some limited availability offerings such as movies on demand but the question will be whether there will be, in the early stages, a tangible difference between existing digital offerings and the IPTV offering.

The real shift will occur once operators and content providers build real interactivity into the technology; the ability to watch, play and do, all at the same time. IPTV will be much, much more than video. The future will see people watching their favourite TV show whilst buying the DVD online, or a T-shirt featuring their favourite star, all via one device. But, some would argue, there's still a long way to go.

## **2. Consolidation, specialisation and strategic alliances**

The key driver in the space is the fact that there are an increasing number of players in the market and that the market will continue to shake out well into 2006. A recent IDC report predicts that by 2010, the market will have consolidated around the largest organisations.

Three strategies are very prominent for service providers to survive.

- 1) Become a world player in the telecommunications market or be eaten by a world player
- 2) Forget about geographic expansion and become a niche player
- 3) Build an alliance network to survive attacks from the large industry gorillas

The historical precedent for European operator consolidation has already been set with TeliaSonera in the Nordic region, where the Swedish and Finnish incumbents merged in 2002.

Massive consolidation in the market will mean the emergence of a group of 'super players', across all areas. Even in the Internet services arena globalisation is evident. Good examples of this include the global uptake of Hotmail and Yahoo mail services and newer players like Google. In fact, ISPs could well become the service providers of the future; broad customer base, strong partnerships with content providers, agile product development strategies.

Expect also to see the emergence of traditional technology vendors like Microsoft as new challengers in the telecoms space.

Partnerships and strategic alliances will also characterise the 2006 market with companies teaming with experts in all areas of IT and telecoms. BT works extensively with HP on the outsourced desktop side of things and Accenture in areas such as HR. For some players, long term strategic alliances are the way forward and are giving companies a tactical advantage in sales situations, for others partners are chosen on a case by case basis according to specific circumstances.

Smaller players will need to come to market with a product that is significantly different and compelling but competition for the same customers will force many out of the market or down the acquisition route.

What's clear is that many of the partnering decisions that companies will make will be customer-led; based on what services the customer chooses and fulfilled by the relevant parties all working in harmony.

The challenge, however, will be on streamlining and establishing these relationships for the benefit of the customer and providing the customer with a seamless service regardless of how many providers are involved.

### **3. Hosted voice solutions**

The opportunity for future voice services lies in hosted IP applications that combine traditional network operations and new enhanced IP services. These services range from simple video conferencing to contact centre applications.

Future demand for these types of bundled packages will be principally derived from educational efforts on the part of service providers, and the overall growth of IP connectivity in each of the Western European countries. As IP VPNs and IP voice services become more prevalent, demand for applications that connect old and new environments and improve network security and efficiency will also grow.

Global corporations like Heinz (the food manufacturer) and Lloyds of London have all deployed IP networks across their UK and overseas office sites and are using the basic IP voice services. The high street banking sector is also shifting its focus towards IP voice, with the building society Bradford and Bingley in the UK utilising an IP network between branches. In Germany, Luthansa is also starting to integrate IP voice services across some of its branch office sites.

### **4. Service bundling a reality**

Discussions have already moved away from VoIP as a standalone service, as voice is rapidly becoming an integral part of an overall IP solutions package including voice, data, video and other value-added services. VoIP and Wi-Fi services will be bundled as part of Internet access products.

Everybody has been pursuing the same triple-play bundling strategy for consumers but in 2006 expect to see consumer services providers expand to a grand slam offering. We think that the triple-play model really is only half the story.

In 2006 there will be two secrets of success in the converged world:

- Content-based services sophistication. The mere availability of a triple-play offering won't be enough to entice customers across; it will be the quality and variety of the content available that will swing it for operators.
- A single point of customer contact and service. A blended service will force operators to look at creating that single-customer view that will make it a) easy to give customers what they want and b) easy for customers to manage their relationship with their service provider. This hasn't happened yet and so the operators will be looking innovate in this area in 2006.

Efficient customer service alongside value-added contact will provide the key to loyal and content customers.

One of the biggest challenges to overcome will be the 'integration tax'; many mobile operators grew by acquisition and have a host of legacy systems that need harmonising and integrating with newer smarter solutions. This is the first important step and many companies, such as Vodafone, have invested heavily in developing smart technology that will link new services with back office systems. Once this is achieved, companies will find it easier to deploy new services and tailor/take them down according to customer response. Being able to develop and roll-out a multitude of new services, waiting to see which ones stick and then rapidly removing and remodelling those that don't will give companies a competitive edge.

## **5. Licensing, compliance and regulation**

The regulation of IP services is the natural next step for IP services. In a bid to win the customer battle, telcos are critically aware of the need to assure customers of the safety of using their services and, as such, are putting security of customer data at the forefront of their strategies. Those that are quick to bring secure solutions to the market will win the trust of the market and potentially gain significant market share – having a robust security strategy will help companies stand out as being truly customer-centric.

With information-sensitive legislation affecting so many organisations, formalized compliance initiatives are emerging. A successful compliance initiative within any organisation will consider not only the impact of applicable regulations but also how to apply technology to meet the challenges of regulatory compliance.

Companies will opt for simple solutions that require as little change in business processes and IT infrastructure as possible. If regulations spur innovation, enhance productivity, reduce costs or aid the rapid adoption of new products and services then companies will embrace investment compliance.

Regulation will help enable growth and control development. Service providers and operators will be looking to put in place a simple legal framework for access-based services.

2006 will see extensions to existing regulatory frameworks and an increase in regulation across territories.

## **Convergence in Billing Systems Top Five Trends**

### **1. Continued outsourced billing solutions for large operators**

Business Process Outsourcing (BPO) has been predicted widely to increase in the next year and BPO service providers will increase their foothold on the market. In consumer-land, nobody has taken the complexity of multiple medium billing in-house as yet and so the trend to outsource continues.

For telecoms operators there is significant commercial advantage to be had through outsourcing the billing process and there is evidence that outsourcing has been beneficial for many companies.

Outsourcing can be a powerful strategic and competitive weapon and so expect to see this trend continue. Operators need to understand the benefits they can realise through outsourcing, but must also view any benefits in the context of their own market positioning and of the level of strategic risk they would be accepting by taking this course.

Meanwhile, providers of outsourcing services need to understand which types of operator are likely to be receptive to such service propositions and how their own market positioning compares with that of their rivals.

The list of benefits is extensive; cost savings through in-house resource and staff efficiencies, quality of service because your company is the outsourcer's customer, state-of-the-art technology, price stability thanks to contractual agreement, the new business opportunity, refocus on core business – innovation.

## **2. Unification and harmonisation of billing process**

On average telecoms companies leak 15% of their revenue year-on-year through non-collection of services used. So it pays to get billing right. In addition, in order to keep customers loyal their experience as a customer must feel slick and seamless – no matter how many different services they choose to use.

One of the most important developments of 2006 will be research and development of the single-customer view and the aggressive move towards developing a unified billing architecture. To reach and retain profitable business and consumer customers effectively, service providers must unify billing architectures and accelerate automation and process improvements.

Customers increasingly expect a single bill for everything they buy and this will lead to a fundamental role change for telecoms operators as multiple needs rely on multi-channel content provision and therefore some way of pulling the costs together in one meaningful form.

Wireless service providers are seeking unified billing solutions as the diversity of services offered rise. Multiple services such as local to long distance, cable T.V. and cable modem necessitate a single billing system that not only simplifies the delivery process but also saves vast amounts of billing expenses while increasing customer satisfaction. These systems must allow a single stop billing for both prepaid and post-paid plans and overcome varying profit margins between the two options.

This would grant the consumer the freedom to switch between accounts rapidly while retaining the same handset.

The growing need for carriers to reduce operational expenses is propelling adoption of billing solutions. These solutions are automated, and therefore, offer carriers the flexibility of lowering operational costs through reduced internal headcount while simultaneously maintaining productivity. Unified billing solutions are also expected to increase network capacity and decrease need for network hardware.

### **3. Flexible billing architectures for competitive advantage**

If telcos want to more than merely survive, they need to deploy billing systems that will give them a competitive advantage. 2006 will see telcos build flexibility into their billing solutions to support the rapid launch of the new services dreamt up by marketers. The mixed-tariff model of selling products – IPTV, voice, data, as well as mobile versus fixed line service packages – will automatically call for an increased level of sophistication at billing stage.

Expect to see a more **event-based** billing structure around consumption of specific pieces of media – a bit like watching a pay per view movie.

Event-based billing flexibility gives service providers a couple of competitive advantages that translate into increased revenues. First, more billing options enable content providers to generate more revenue by billing for more than a straight fee for service. Second, it allows them to sell packages of bundled services such as local and long-distance voice along with IP data at a discounted rate. This kind of cross-product discounting serves to build revenue because providers can sell more services and stem customer churn by engaging them in tailored packages of bundled services.

While flat-rate billing offers the illusion of the best deal from the customer's standpoint, it is often more expensive because it focuses on global charges for services business customers don't always use. Billing for actual usage - based on the volume of data, when it was used, and bandwidth used - can prove to be more cost-efficient for the customer in the long run.

In the future, it's clear that IP services will be less about the IP network itself, and more about the content. Customers will be more concerned about what specific services they purchased at what price than whether or not the service was delivered by the IP network or by frame relay.

The next generation of IP technology will provide even more information for billing purposes than the existing IP version. With this technology a service delivered, such as video on demand, will have identifiers embedded in it that mediation devices will track. Content providers and customers will know exactly what service was billed for, at what time and at what rate. A billing architecture capable of handling these new parameters will enable providers to bill for the services and content in different ways, thereby further increasing their revenue stream and maintaining a competitive advantage.

## **Mobility Top Trends for 2006**

### **1. Trust and security**

Security will be high on the agenda for telco operators in 2006 in the battle win the loyalty of existing customers and win the trust of new ones.

There are many strategies for capturing and keeping high-value customers but one of the most effective is to build a trust-based relationship. If the customer trusts the network and its processes a sense of comfort and safety will be engendered but, in such a competitive landscape, this is hard to gain and easy to lose.

One cannot buy trust but one can invest ways in which to protect it. A solid security infrastructure supporting audit processes and accountability is essential.

The other key factor will be in using a strong mobile security strategy to convince enterprise of the value of building a truly mobile workforce. The consumer battle has all but been won with the business market having been neglected thus far, and businesses are still letting worries over security slow mobile uptake.

If data is protected properly within the network, it can be effectively protected on the device.

But watch out for the VoIP and wireless threat! Hackers are finding it increasingly easy to steal information from devices that contain people's private data, as a growing number have wireless capabilities, security experts have said.

Wireless technologies like Wi-Fi may be more widespread, but many users are still ignorant about the security measures they must use on these networks to keep hackers at bay. Security experts see 2006 as the year when threats on wireless networks will come of age.

As Wi-Fi moves to airplanes, trains, and other public locations, cyber-criminals will seek to exploit the lack of knowledge about mobile security measures to gain access to user information. The prime target? Mobile devices carried by business users.

## **2. CRM – understanding customer need**

It's all about getting the most out of existing customers and breeding loyalty with the existing customer base.

Creating a single view of every customer will become the Holy Grail for every company. This will breed understanding of what the customer wants and will also enable companies to service customers better – from content provision to billing.

Telecoms operators will increasingly be faced with customer demands for new and innovative services delivered simply via a converged model but being able to do this depends on telcos really tracking and understanding the needs of customers.

Many large organisations continue to focus on growing revenues and profits, first and foremost. The reality is that there exists a far more effective success strategy: focus on the customer and the customer's intent in interacting with the company.

2006 will see a concerted effort on the part of the network operators to turn the wealth of information they have on their customers into valuable insight that they use to enrich their offering and, hopefully, stop customers from defecting.

CRM analytics have become, and will continue to be critical in helping organisations better understand buying behaviour and will help in developing, tailoring and cross-selling solutions across the customer base. Having the information to be able to identify cross-selling and bundling opportunities will be absolutely crucial in the race for market share as it really will be all about sales on value-added services.

## **Two key priorities:**

- **Understanding the customer**

Companies are likely to invest a lot of time and effort in really understanding the customer. None of the large companies really know what customers are using and what they really want. The trend will be for tracking usage patterns and developing apps according to want and need.

A better understanding of the needs of individual customers is an important element of improving customer satisfaction and aiding customer retention.

- **Keeping hold of existing customers**

What naturally falls out of a deeper level of understanding of customer buying and usage information is an ability to track what customers really **like** and develop content/services accordingly.

It sounds simple but by providing a service that you know a customer already wants will not only save money in development costs but will also help the customer feel he/she is valued.

### **3. Experiential mobility and M-Commerce**

It's all about functionality and fun. 2006 will continue to see the development of experiential mobile applications and the emergence of m-commerce services, increasing in reach and importance over the next two years.

Rich content applications for mobile devices and true ability to do almost anything you want via your mobile device. Growth of off-portal mobile entertainment will give rise to the development of home-grown and original content. Enriching the experience for mobile users:

- a. Film and video on demand
- b. Home-grown gaming
- c. Music
- d. Gambling
- e. Ring tones
- f. Lifestyle

Shopping will become as much of a reality on your phone as it is on your PC but poor user experience – poor bandwidth, slow access etc – has been the real barrier to this. Faster access to a more interactive and attractive shopping environment (enhanced visual and audio content that is enabled by broadband) is likely to have a positive impact on sales. The next two years will see operators develop faster access to more interactive and attractive shopping environments using broadband enabled and enhanced visual and audio content. The impact on sales is likely to be positive – crucial when considering that the barrier to the adoption of m-commerce strategies within enterprise has been the perceived revenue opportunity.

It is still, however, taking some time for customers to get used to the idea of buying goods and services via mobile phones but GPRS and UMTS along with a more attractive user interface this is starting to change. The other catalyst for change will be the buy-in of high profile brand names and their appearance within the portfolio of services offered by the network operators.

People are waiting for the moment when they can order online any time, any place, anywhere and 2006 will be the year that this starts to happen.

#### **4. Next generation messaging and worldwide text messaging platform**

According to industry commentators<sup>1</sup> we are living in the era of the Instant Gratification Generation (IGG). The lifestyle and mindset of the Instant Gratification Generation (IGG) is having a dramatic impact socially and economically. Actually more a pervasive cultural shift than mere target demographic, it's the tendency of people to be online or accessible at almost any time. It's the desire to want everything – from gossip, news and market data – to be up-to-the-second. It's also the need to get consumer goods and business services in an instant.

The IGG trend presents a challenge to mobile operators: How to deliver services quickly and cost effectively enough to satisfy customers' desire for the latest features, services and mobile applications. To compete, operators are migrating from legacy systems to next-generation networks that give them new levels of speed, efficiency and performance.

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<sup>1</sup> 'The Future is Now' in Mobile Europe 2005

Given the success of SMS, messaging is widely regarded as critical in the battle for market share. Mobile Instant Messaging will take hold and evolve over the next 18-month period and many European operators have invested heavily in MIM. Key priorities are:

- converged messaging solutions
- mail to voice
- premier SMS
- voice portal
- MMS postcards

Mobile messaging will be the bridge that will assist operators to aid the take-up of mobile data in Western Europe. This will be vital in attracting and retaining the IGG and so we can expect to see a proliferation of new multimedia services over the next 12 months.

A lot has been said about the next mobile 'killer-app' but in terms of potential and current usage of SMS it looks clear that multi-media video messaging coupled with existing messaging usage will be hot in the year ahead.

## **5. Fixed Mobile Convergence (FMC)**

The convergence of the fixed and mobile markets looks set to have a profound effect on the telecom industry as it redefines how telecoms services are delivered and how carrier businesses are structured.

Using a mobile handset, future users will be seamlessly served and charged based on the services they use and the contents they access, rather than on access technology. This will enable carriers to sell capability rather than capacity and move from a product to a customer-focused operation – critical in the ongoing battle for market share.

The Vodafone and BT partnership (formed in 2004) marked a significant development for both the fixed line and mobile market and next generation networks are rapidly evolving as a result of the support from the major players.

Consumers continue to demand voice services but at ever-lower prices. They are willing to accept changing technologies more readily than ever before particularly where entertainment is concerned.

Business users will start to look at multi-access, multi-local solutions to solve business connectivity problems and FMC could well be the answer.

From a market perspective, the low-cost, high-efficiency business models that CDMA and WiMax could offer poses a serious threat to the traditional GSM/UMTS operators. Operators see a huge opportunity to cover larger areas, most notably in rural areas, relatively easily which is offering many new entrants the opportunity to enter the market cheaply.

#### **6. Wireless broadband: WiMax the next big thing?**

WiMax product development has finally become reality thanks to recent industry developments and the crucial ratification of the 802.16e standard.

The standard was finalised two months ago but it was formally ratified this week (9 December) by the Institute of Electrical and Electronics Engineers (IEEE). This should give the market greater confidence to develop WiMax products.

Possible movement from companies like Vodafone down the WiMax route will see a move towards making mobile computing a reality via smartphone and there has been some suggestion that 2006 will see the death of the PDA as access and quality of service will improve on smaller handsets.

Mobile WiMAX services are unlikely to service before 2007, but trials and certification tests will commence before Q1 is out this year, with product releases expected by the end of the year.

It is, as yet, unclear how movement the market will see as regards 802.16e, but the market will be watching other developments - such as TD-CDMA - closely, which may yet turn out to be the sleeper hit of the year. It's the only wireless broadband technology that's been standardized by the ITU and is compatible with 3G TDD spectrum on offer. It's also the only one with handsets in the pipeline – chief TD-CDMA champion IPWireless has developed a wireless VoIP handset with semiconductor manufacturer Atmel and OEM partner UTStarcom.

TD-CDMA has its own industry alliance (the Global UMTS TDD Alliance) and is already up and running commercially in at least half a dozen networks.

### **Summary**

The huge changes that are taking place within the market are exciting and daunting in equal measure. Those telecoms companies that have survived the flux of the last few years are watching the market open up before their very eyes. The opportunities to create much needed revenue streams from the wireless revolution are incredible but the competitive landscape is becoming more and more complex.

Traditional operators will need to be aware of the emergence of a new breed of service providers, some of whom will come from less traditional beginnings. Software companies like Microsoft, who are placing bets on the success of IPTV, ISPs like Yahoo! and content providers/internet companies like Google are all preparing themselves to take advantage of telecoms convergence to become the telecoms companies of the future.

What is clear is that 2006 will be the year of the customer. Telecoms organisations will be focused on making their offerings compelling and sticky and being a customer a rewarding experience. Companies will have to gain a real understanding of what customers want and need, so that they know how to keep them interested whilst they are being bombarded with offers from competitors.

Technologically, innovation will be the watchword for 2006. Exciting new technologies inspired and facilitated by convergence will revolutionise the way that people consume information and will open the doors for operators to finally generate real revenue once again.

## **About Atos Consulting**

Atos Consulting, the global consulting practice of Atos Origin, is a leading provider of business, process and technology consulting services. With more than 2,500 staff globally, it focuses on delivering proven, pragmatic solutions to the telecom, manufacturing, financial services and public sectors. <http://www.atos-consulting.com>

## **About Atos Origin**

Atos Origin is an international information technology services company. Its business is turning client vision into results through the application of consulting, systems integration and managed operations. The company's annual revenues are more than EUR 5 billion and it employs over 46,000 people in 40 countries. Atos Origin is the Worldwide Information Technology Partner for the Olympic Games and has a client base of international blue-chip companies across all sectors. Atos Origin is quoted on the Paris Eurolist Market and trades as Atos Origin, AtosEuronext, Atos Worldline and Atos Consulting. For more information, please visit the company's web site at [\*\*http://www.atosorigin.com\*\*](http://www.atosorigin.com)

## **Atos Origin in the Telecom Sector**

Atos Origin's turnover in the telecoms industry is close to €1 billion. It delivers consulting (through Atos Consulting), systems integration and outsourcing expertise to 350 customers around the world, including major telecom operators in Europe such as France Telecom, KPN, Telecom Italia and Vodafone. Atos Origin has been active in the telecoms market for more than 20 years.

Atos Origin is the European market leader in prepaid billing solutions, managing 25 million users and two billion transactions a year in payment systems. It was the first company to design and manage customer loyalty programmes for the telecoms industry, serving some 13 million members. It supports and maintains 70,000 secure data connections for tele-workers.

## **CUSTOMERS**

Atos Origin's 350 customers in the telecoms sector include:

Vodafone, Vizzavi, KPN, e-plus, Telecom Italia, TIM, France Telecom, Orange, Wanadoo, Bougues Telecoms, BBNEED, Virgin Mobile, BT, BASE, MCI, Telefonica, AT&T, Telewest Broadband, Lucent Technologies, Cegetel, Turkcell, Vanco, 3, Alcatel, Gamma Telecom, Equant, Amena, Cosmote, Thus, Kingston Communications, T Mobile, NTL, Cable & Wireless, Your Communications, Energis, Telkom, Deutsche Telekom, Swisscom, Wind, Telstra, Chello, UPC, Ericsson, O2, Tele2, Embratel and Digi.

## **SERVICES**

Atos Origin's services include:

- Service solutions: solutions are developed in-house or with partners and include SMS, VOIP messaging, mobile payment systems, machine-to-machine, roaming service center; and conferencing and gaming.
- Business and operations support systems include: billing & rating; customer relationship management (CRM); and revenue management.
- Enterprise solutions include enterprise intelligence, payroll, HRM, Supply chain management and workflow.
- Areas of expertise: billing systems; application management; and outsourcing.



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