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ANALYSIS: BUSINESS MODELS

The price is not right

Comments from analysts suggest that the halcyon days of cheap mobile broadband services are coming to an end for heavy users

WELCOME BACK TO THOSE OF YOU who have just returned from Mobile World Congress in Barcelona. As you'd expect, mobile broadband was a dominant theme at the show, with varying emphases on technology developments, business models and rollouts. Sadly I for one was still unable to benefit from my UK-based service: I decided not to use my Vodafone mobile broadband dongle during the show because of the extortionate roaming charges.

Nevertheless, prices for mobile broadband within national boundaries are insanely cheap at times and the discussion about sustainable business models continues to run. Speaking to Total Telecom at Mobile World Congress, Didier Bonnet, global head of consulting services, telecom, media and entertainment at Capgemini, said for once the telecoms industry has found a 3G application that works. But he, too, fears that the industry has rushed too soon to implement pricing levels that are unsustainable, with "phenomenal" price decreases to attract new users.

"I think there will be a rethink on mobile broadband pricing," said Bonnet.

He added that he is encouraging Capgemini's operator customers to consider different types of pricing models depending on the user. He said operators should be driving traffic among lower users and limiting traffic generated by higher users.

Indeed a research note from ARCchart says the days of cheap mobile broadband access, particularly for users in Western Europe, may soon be over. It cites two reports from UK-based researchers Omnitele and Strand Consult that conclude the current business model is unsustainable for mobile operators, because of the cost of building out capacity to meet rising demand for dongle or laptop 3G services.

What users will start to see are more flexible tariff options, as Bonnet suggested. Mobile operators are already offering pay-as-you-go and contract models. From as soon as next year, heavy users could find they will have to pay more or have their usage capped, while casual users will be encouraged with better basic deals and more flexibility.

Meanwhile some operators in markets that have just issued 3G licences are only now gearing up for the launch of mobile broadband services.

Turkcell told Total Telecom at Mobile World Congress that it has high hopes both for mobile broadband and mobile Internet services once it launches commercial 3G services in June this year.

According to Cenk Serdar, chief business development officer, Turkcell and its rival companies Vodafone Turkey and Avea will sign formal 3G agreements in February or March. They will then be given three months to build out some network coverage, although Serdar said he is unable to disclose the contractual obligations as yet. Turkcell has also yet to announce its vendor partners and which HSDPA speeds it will support.

Serdar believes there is a huge opportunity in Turkey's broadband market, which has a penetration rate of just 33%. Turkcell plans to target unconnected households with both 3G and its fibre network, and believes mobile broadband will likely be used to substitute or complement DSL services.

Meanwhile in China the mobile operators are now building out their 3G networks: China Unicom said it plans to provide 3G coverage to 70% of China's population by the end of the year, deploying 80,000 HSPA base stations. China Mobile has previously said it will deploy 60,000 TD-SCDMA base stations this year.

During Mobile World Congress, GSMA chief executive Rob Conway described the Chinese 3G rollout as "the most sweeping deployment of mobile broadband ever". ■

Anne Morris

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Mr. Wu Jie, VP of Wireless Products Division, ZTE Corporation


The financial crisis has caused a major downturn in the global economy, but the mobile telecommunications industry is still showing positive development.

The primary driving force of this development is the demand for mobile voice services from the next billion users in the emerging markets, as well as increasing demand for mobile broadband services in the developed market.

However, as mobile penetration increases and competition grows, operators will be forced to change their conventional business model of increasing user numbers through higher investment.

If they are to achieve a good balance, operators will have to pay more attention not only to providing more high-quality and innovative new services, but also to total cost of ownership (TCO) of networks.

As a rising force in mobile telecommunications, ZTE Corporation places a huge emphasis on the strategy to develop low-cost technology innovation and fast customisation. ZTE's new series of SDR-based base stations will enable more flexible network adjustments and updates and a smooth evolution to LTE in future, as well as the co-existence of multiple standards and frequency bands to realise the SINGLERAN and reduce TCO.

Recently, ZTE's HSPA+ 64QAM helped CSL in Hong Kong to achieve a maximum downlink speed up to 21 Mbps based on an SDR platform, which brings the deployment of mobile broadband into a new era. As the mobile broadband market continues to heat up, ZTE's development concept of convergent, open, flexible and green solutions has gained attention and recognition from increasingly more leading operators in Europe, Asia Pacific, and Latin America, and elsewhere.

ZTE will continue with its strategy of innovation and sustained investment in order to be one of the most reliable cooperation partners in the transformation and evolution of the global mobile operators.

ANALYSIS: NETWORK EVOLUTION

The long stretch

LTE got less of a look in at this year's Mobile World Congress as operators focused on how to extend the life of their existing HSPA networks

TELSTRA HAS LED THE WAY WITH its mobile broadband service rollouts and the momentum looks set to continue this year: the Australian operator announced at Mobile World Congress in Barcelona that it would launch its 21-Mbps HSPA+ service on its Next G network to business customers on 23 February, with a consumer launch to follow in April.

But it was the operator's comments about its plans for later this year that underlined how far operators are now planning to stretch their HSPA and HSPA+ networks. 3G LTE, meanwhile, seems to be receding further into the distance.

Telstra said it intends to increase its HSPA+ network speeds to the maximum level specified for the technology, which is 42 Mbps, by the end of 2009. The operator's CEO Sol Trujillo added that it should be possible eventually to have speeds of up to 100 Mbps with HSPA+.

Previously it was believed that operators would need LTE to achieve these kinds of speeds, but new developments with HSPA+ mean the networks could be stretched further even without the need to deploy new antenna technology such as MIMO. Telstra is working with Ericsson, which demonstrated HSPA multi-carrier technology for peak downlink data rates of 42 Mbps at Mobile World Congress, as well as Qualcomm and Sierra Wireless.

According to Ericsson, multi-carrier technology is the next step in the evolution of HSPA and enables consumers to receive data simultaneously on two frequency channels. This doubles the user data rate in the coverage area of an HSPA network and on the cell edge, where consumers normally experience lower data rates.

Speaking to Total Telecom at Mobile World Congress, 3G Americas president Chris Pearson said it looks increasingly like LTE will now be delayed until around 2012 by most of the large WCDMA/HSPA operators, largely in view of the global financial crisis: "I think an HSPA operator has a lot of runway left," said Pearson. "LTE will happen, but there is so much flexibility with HSPA+."

Verizon Wireless is one operator that has said it plans to deploy LTE in 2010. The US operator announced at Mobile World Congress that Alcatel-Lucent and Ericsson would provide its LTE network in the initial stages.

But Verizon Wireless has a different business case as it currently runs a cdma2000 EV-DO network and does not have the same flexibility as HSPA operators to increase speed and capacity, Pearson added. In order to be able to compete with rival operators T-Mobile USA and AT&T, which are both expanding their HSPA networks, it needs a roadmap beyond current revisions of EV-DO.

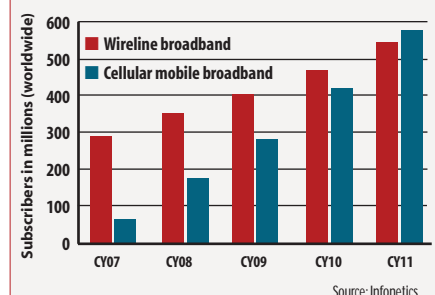
Telstra's Trujillo made his intentions clear: "We don't have to go to LTE right away," he said.

In fact this year's Mobile World Congress was certainly not LTE's show. "It became an event focused on extending the efficiency of existing networks (through new spectrum allocations, hotly demanded by nearly everybody; through to new antenna approaches); and extending the life of the 3G families for mobile operators," commented ARCchart in a research note.

It seems LTE will have to wait for its star to shine another day. ■ *Anne Morris*

BROADBAND TIPPING POINT

Cellular mobile broadband subscribers will surpass wireline broadband subscribers in 2011



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CHIPSET TECHNOLOGY

Gobi 2 to be available in June/July

Qualcomm to integrate new radio frequencies and higher-speed HSUPA into next version of chipset

QUALCOMM EXPECTS the second version of its mobile broadband chipset technology, Gobi, to be available in laptops and notebooks from June/July this year, and says sampling has already been carried out by device manufacturers.

According to Mike Concannon, senior vice president of connectivity and wireless modules at Qualcomm CDMA

Technologies (QCT), Gobi 2000 will also now include the 900-megahertz frequency for Europe, as it looks increasingly likely that operators in the region will be able to reuse their 2G spectrum for 3G networks. The 800-MHz frequency will also be included for Japan.

Other enhancements to Gobi 2 will include higher-speed HSUPA of 5.76

megabits per second, assisted GPS, and support for Linux.

QCT launched Gobi 1000 in the middle of 2008. The Gobi design has been licensed only to Foxconn so far, but Concannon said Qualcomm is considering bringing another manufacturer on board soon. ■

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HSPA NETWORKS

Americas on a roll

Number of HSDPA networks in LatAm reaches 41 in two years as US buildouts continue

THE NUMBER of WCDMA/HSDPA networks in Latin America and the Caribbean has increased from zero to 41 in 20 countries in just two years, marking a rapid take-up of the technology across the region.

Erasmus Rojas, director of Latin America and the Caribbean for trade body 3G Americas, said 35 of the networks are in Latin American countries while the rest are in the Caribbean.

He added that the number of subscribers in the region has been estimated at 5 million by Informa Telecoms & Media, and noted that a further 5 million could be added in just a year based on the current trend. Brazil currently accounts for some 40% of all the HSDPA subscribers.

Chris Pearson, president of 3G Americas, said Rogers Wireless in Canada now has 75% coverage with its UMTS/HSPA network. AT&T in the US now covers 350 cities and T-Mobile USA, has built networks in 130 cities. ■

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SPECTRUM

Ofcom moves forward with 900-MHz

Regulator suggests Vodafone and O2 should release 10 MHz of spectrum

OFCOM HAS proposed that the existing UK 900-megahertz licensees should release 10 MHz of spectrum in two blocks of 5 MHz each. This would mean that Vodafone and Telefonica O2 would have to relinquish some of their spectrum.

The freed-up spectrum would then be released to the market through an auction held by Ofcom, subject to an ongoing consultation, in the summer of 2010. The licences would be tradable to ensure the most efficient use.

Ofcom's initial consultation also proposed to remove the limitations attached to 2G and 3G licences, freeing them for a wider range of uses such as mobile broadband and enhanced data services.

The proposals follow the Digital Britain report which proposed that industry players should get together to agree a series of trades to redistribute the spectrum and then use it to deploy 3G services. ■

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Mobile users to reach 6bn in 2013

The number now stands at 4 billion globally

THE NUMBER of mobile users worldwide has now hit 4 billion, according to latest research from Wireless Intelligence.


It's now being predicted that the 6-billion mark will be reached by 2013, according to the GSM Association in figures released ahead of Mobile World

Congress. The number of mobile broadband users globally is now estimated to be 100 million.

The GSMA said the mobile broadband opportunity is a vast one as fixed broadband connections currently amount to just 1.1 billion globally, or one sixth of the world's population. ■

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Learn more about how Alcatel-Lucent is building on its extensive experience in high-growth markets plus its broadband market leadership to help telecom operators in high-growth markets transform their broadband business.

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