

## Non-SMS data revenues taking off

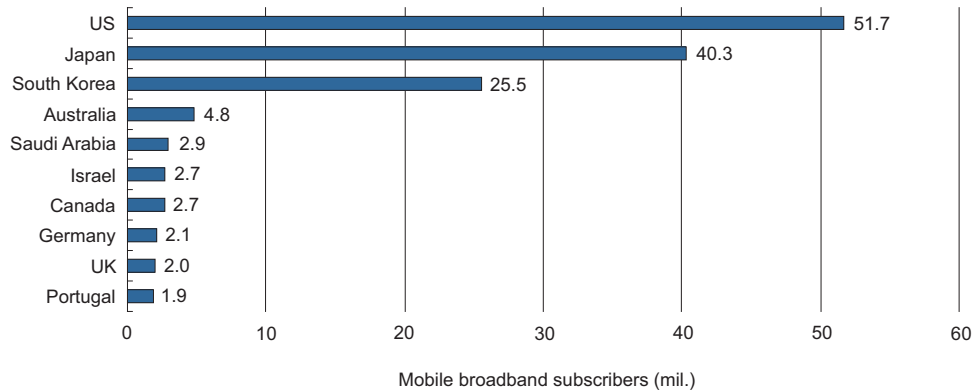
The mobile industry has long tried to boost non-SMS data revenues in a bid to offset declining voice revenues, but the rise of mobile broadband meant 2008 was the year when its efforts finally started translating into significant results.

For example, AT&T Mobility, which teamed with PC vendor Apple to launch the iPhone in June 2007 and the iPhone 3G in July 2008, generated US\$1.77 billion in data revenues from services other than SMS in 3Q08, up 50% from US\$1.18 billion in non-SMS data revenues in 3Q07, according to Informa Telecoms & Media estimates; the US\$1.77 billion in non-SMS data revenues in 3Q08 was 65% of the operator's total data revenues of US\$2.73 billion in the quarter. Total data revenues, in turn, were up 51% in 3Q08 from US\$1.81 billion in 3Q07. In addition, in 3Q08, data revenues were 24% of total revenues, up from 18% in 3Q07. That means that non-SMS data revenues were 16% of AT&T Mobility's total revenues in 3Q08. The operator has upgraded almost its entire handset portfolio to support HSPA and as a result had 15.8 million HSPA subscribers by the end of 3Q08, up dramatically from 5.7 million at the end of 3Q07.

Germany's Vodafone D2 is another example. The operator launched HSDPA services in February 2006 and saw subscribers increase from 140,000 in 3Q06 to 500,000 in 3Q07 and 1.6 million by the end of 3Q08, making it one of the largest mobile broadband operators in Europe, according to Informa Telecoms & Media estimates. Over the same period, the operator also saw a sustained rise in non-SMS data revenues, which increased from US\$169 million in 3Q06 to US\$282 million in 3Q07 and US\$359 million in 3Q08.

Telstra is one of the many examples of an advanced mobile broadband operator in Asia Pacific. The Australian operator launched HSDPA services in October 2006 and saw subscriber numbers jump to 1.5 million in 3Q07 and 4 million in 3Q08. Non-SMS data revenues increased 42% from US\$155 million in 3Q07 to US\$220 million in 3Q08, according to Informa estimates. Telstra, which previously operated an EV-DO network, migrated subscribers to HSDPA and closed its EV-DO network in April 2008.

SK Telecom in South Korea is an example of a mature mobile broadband operator, since it has had many years to build its mobile broadband subscriber base given that it launched EV-DO services in January 2002. However, the operator is now actually migrating its EV-DO subscribers to HSPA. In 3Q08, it reached parity, with 14.8 million mobile broadband subscribers – 7.4 million subscribers each to both EV-DO (down from 8.7 million in 3Q07) and HSPA (up from 1.2 million in 3Q07) – the total number of mobile broadband subscribers at the end of 3Q07 was 9.9 million, meaning the number had increased by 49% by the end of 3Q08. In addition, in 3Q08, SK Telecom's non-SMS data revenues were 59.5% of total data revenues.

**Figure 2.2: Global top 10 mobile broadband markets, 3Q08**

*Note: This data is based on a different methodology than the Informa Telecoms & Media mobile broadband forecasts.*

*Source: Informa Telecoms & Media*

This will change dramatically by 2013, however. Although Informa Telecoms & Media estimates that the US, Japan and South Korea accounted for 71% of global mobile broadband subscribers at the end of 2008, that this will fall sharply to 31% by the end of 2013. Not surprisingly, the huge mobile markets of China and India, which are significantly expanding mobile broadband services in 2009, will see their combined share of global mobile broadband subscribers reach 20% by the end of 2013, up from less than 1% in 2008.

## USB modems, notebooks and netbooks – the new frontier

The mobile broadband market is made up of two key segments based around portable and mobile devices, respectively. The portable segment started to take off in 2007 with the arrival of USB modems, while in many markets the mobile segment took off in mid-2008 with the arrival of the iPhone 3G and the wave of competing mobile Internet-oriented devices it inspired.

For an indication of the success of the portable segment, look no further than Huawei. The vendor launched its first mobile broadband USB modem in late 2007 and says it shipped 7 million mobile broadband USB modems, datacards and modules in 2007. That increased to 15-20 million in 2008, with USB modems taking a much greater share of Huawei's total.

One of the most important aspects of the portable segment is that it is a new market that is already delivering significant new data revenues for mobile operators. Although operators have long offered mobile services to notebook computers, these were usually expensive niche services targeted at niche vertical markets such as logistics. That picture changed dramatically in late 2007 and 2008 with the arrival of affordable mobile broadband networks, devices and services.

## Revenue gains bring traffic pain

Mobile operators have learned that their move into the portable market comes at the cost of booming traffic. Vendors are claiming that mobile broadband subscribers using portable devices represent 5% of total subscribers on some operator networks, but are generating more than 90% of total traffic.

The major operators are making similar points. Vodafone says data traffic on its networks increased more than tenfold in the year ended March 2008 compared with the previous year. While non-messaging data revenues increased a healthy 55% over the same period, due to “strong growth in business e-mail and PC connectivity devices” along with “strong takeup of mobile broadband USB modems”, the 55% increase in non-messaging revenues pales in comparison with the ten-fold increase in data traffic.

The result is that mobile broadband operators are taking steps to limit traffic on the one hand, and to dramatically reduce the cost of carrying traffic on the other. Limiting traffic includes everything from modifying service plans – for example, by introducing usage limits on true unlimited packages – to introducing traffic management systems in networks. For example, in late 2008, Vodafone Hungary installed software that allows it to reduce the download speeds available to subscribers that have exceeded their monthly data limit. The operator says it launched HSDPA in late 2007 and saw traffic increase by 10 times by late 2008, leading it to install the traffic management software.

For the medium to long term, operators accept that they will need to upgrade their mobile broadband networks to support faster data speeds, higher capacity and a lower cost per megabyte. Vodafone is again a good example, as in February 2009 the operator threw its weight behind HSPA+, which it said had already proved in its trials to be able to deliver 20Mbps downstream data rates using MIMO and 64QAM modulation. Vodafone says its trials suggest that with HSPA+ subscribers should see average download speeds of at least 4Mbps and peak rates of 13Mbps, which could reduce costs per megabyte by at least four times. The operator says it plans to launch HSPA+ services in some markets during 2009.

Of course, some operators are also looking to LTE to provide a leap forward in network efficiency, but the earliest LTE deployments will come in 2010 and there are increasing signs that the global downturn is leading other operators to delay LTE schedules by several years.

## Downturn will boost HSPA+, delay LTE

Among all the buzz about mobile broadband at the Mobile World Congress in Barcelona in February 2009, a number of major operators quietly admitted that their LTE deployment timelines were slipping by several years. This is partly due to the economic downturn and the resulting need to delay major network upgrades until better times, and partly due to the