

China: First steps into high-speed services

Joss Gillet

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2008 is likely to be a challenging year for operators in China as the first high-speed network is expected to be commercially launched by the Summer, driving an increase in competition. China has been growing by more than 18%, year on year, over the last ten quarters reaching a market penetration of 38% in Q3 2007. The biggest cellular market in the World has exceeded 500 million connections and Wireless Intelligence forecasts another 300 million net additions over the next five years.

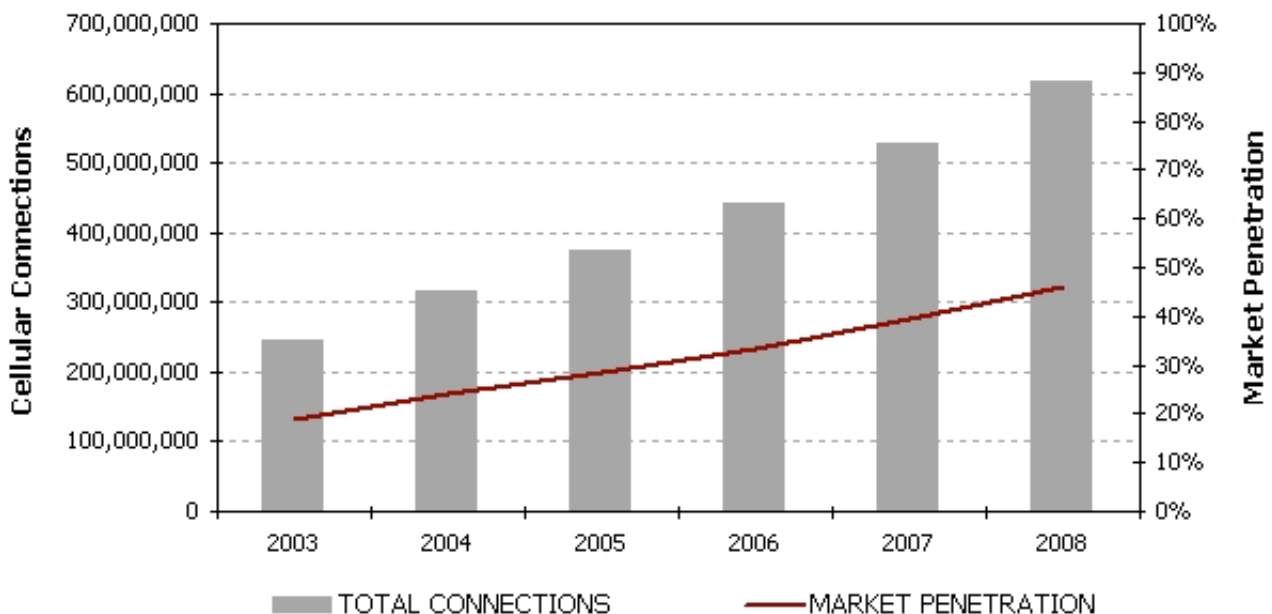
China Mobile, the market leader, has been growing at a fast pace as it expands its coverage to rural areas and it has also been trialling its TD-SCDMA network. Both China Mobile and China Unicom are looking to offer a wider range of data services matching the focus of operators who have already launched high speed networks.

The tipping point for a fast adoption of high-speed services is network coverage. Four years after the launch of the first WCDMA network, Western operators have been slow at improving their WCDMA coverage which, in most countries, is still limited to the biggest urban areas. In a recent analysis, we found that 5-6% of China Mobile's subscriber connections will be TD-SCDMA by 2010. However, in order to achieve such opportunities, the Chinese operator will have to make its high-speed network widely available.

China, home of the telecoms giant

We have recently updated our forecasts for the Chinese market and like many of you we are following the prospective development of high-speed networks closely. Since Q1 2005, China has been growing at an average of 4% quarter on quarter. Contrast this with a more mature market like the USA which has averaged 2% growth on a quarterly basis since Q3 last year. Today, China represents 40% of Asia Pacific cellular connections, and 16% of the World cellular connections. If the market follows the pattern we believe it will next year, it can add another 100 million connections and reach 46% market penetration in just 5 more quarters.

Figure 1: China: Cellular connections and market penetration

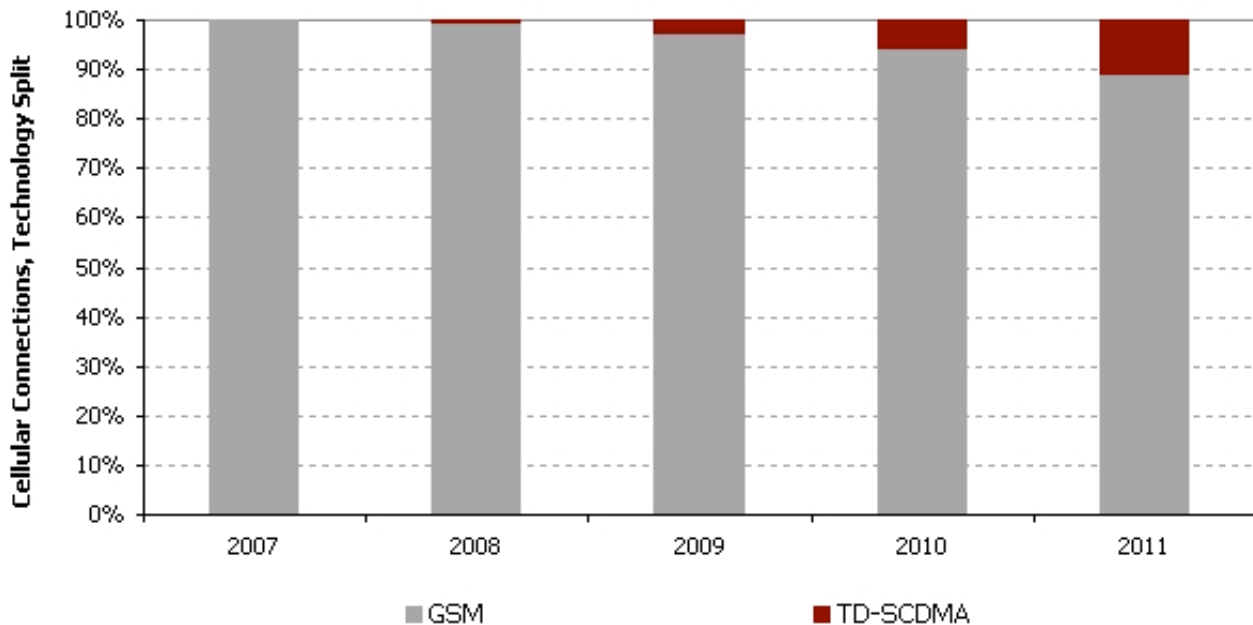


China Mobile has been reporting quarterly growth around 21% year on year since Q1 2007 and has already passed 350 million connections. China Mobile is a telecom giant and this success is mainly due to its expansion in rural areas. In contrast, most Western operators are focusing on customer base retention as they compete in markets with penetration often above the 100% mark.

2007 was the year of intense focus surrounding which technology Chinese operators should adopt to launch high-speed services. We expect 2008 finally to be the year of implementation and predict the Chinese government will issue 3G licenses in early 2008. China Mobile has invested in TD-SCDMA network, trialling the homegrown network in 10 of the biggest cities. We can expect China Mobile to launch a series of new services running on the high-speed network in time for the Olympics Games in Beijing, next Summer. In that case, and assuming a fast deployment of the network across the country starting mid 2008, the operator's TD-SCDMA subscriber base could

represent 5-6% of its total connections by 2010.

Figure 2: China Mobile: Technology migration

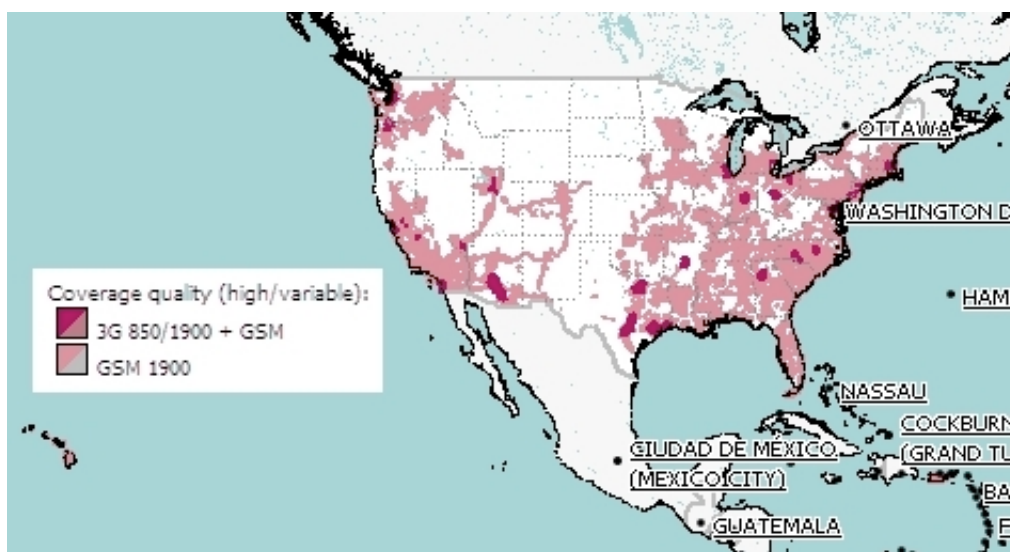


As an illustration of the opportunities around data usage in China, China Mobile has generated, from its GSM network, 13.8 billion RMB from non-SMS data business over the first half of 2007. It has also increased MMS usage by 77.5% between 1H2006 and 1H2007. Migrating to TD-SCDMA is an opportunity to generate high revenues from data services such as Internet access and video calling. Such scenario assumes that devices are ready on time for next August, widely available and affordable. A number of manufacturers, from ODMs to OEMs, are already showing devices coming out of their TD-SCDMA platforms, some already looking like the notorious iPhone.

High-speed services: A tale about network coverage

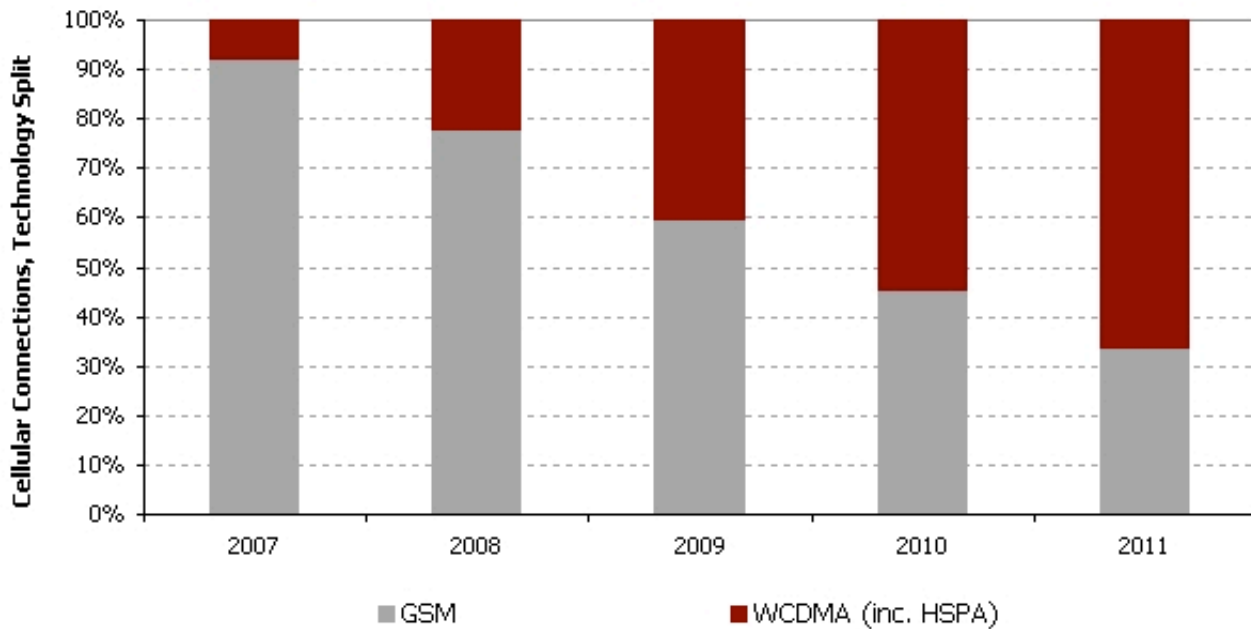
Network coverage is the fundamental factor that will drive the mass adoption of high-speed services, by means of an example, we look at AT&T in USA. Increasing WCDMA network coverage has focussed on the biggest urban areas. For instance, a look at the AT&T coverage map of the US territory gives a clear view of its WCDMA coverage.

Figure 3: AT&T Mobility: Coverage map, USA



Increasing CAPEX in order to improve network coverage is crucial for an operator which aims at offering a wider range of data services. For that matter, AT&T has recently announced a plan to deploy and increase capacity of its WCDMA network during the first half of 2008. This strategic move follows the recent focus on AT&T's WCDMA HSPA launched in early 2007. By improving its network coverage, AT&T's WCDMA cellular connections are expected to take over GSM connections by 2010. WCDMA HSPA connections can account for more than half of the total WCDMA connections by that time frame.

Figure 4: AT&T: Technology migration



In a press release published in early December, AT&T announced that 'since 2004, the company has invested nearly 230 million USD on wireless network enhancements to expand coverage, add capacity and grow its 3G network in South Carolina'. However, in Q4 2006, the operator's CAPEX reached over 2 billion USD and its recurring revenues over 8 billion USD. This would suggest that since 2004, AT&T's network expansion would represent just over 10% of its capital expenditure.

China Mobile 2007 CAPEX budget is just below 100 billion RMB, and aims at attracting new customers, launching new data services and improving network coverage. Over the first half of this year, the operator's CAPEX represented 30% of its operating revenues.

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