

## Key Trends in 2009 for China & India: Growth Amidst the Storm

### Executive Summary

As the global economy shrinks in 2009, the relative importance of China and India as growth engines has never been greater. Even at reduced levels of economic growth, China and India will account for most of the world's GDP growth this year.

In the telecom sector, there is some evidence already in China of a slowdown in telecom subscriber growth, but licensing of 3G is providing a counter-cyclical boost as 3 operators roll-out networks and marketing campaigns. India is about to commence its 3G licensing process, adding new vigour to that already dynamic market. A newly release white paper on India's 3G opportunity can be found at [www.bdaconnect.com/india/ficci](http://www.bdaconnect.com/india/ficci)

Today China and India combined account for around 900 million mobile subscribers. BDA forecasts this to grow to 1.7 billion by 2013. In terms of new mobile subscribers, China and India will account for more than half of the world's growth in the next 5 years.

In this Analyst Note, we take a look at the key trends that will be defining the telecom and Internet sectors in China and India in 2009.

BDA's teams of Beijing and New Delhi based professionals look forward to assisting you to profit from opportunities in these critical growth engines.

**Top Trends for China's Telecom Sector in 2009****The initial impact of 3G is a USD 20 billion boost to capex, boosting principally Huawei and ZTE**

- BDA expects China's telecom capex in 2009 will total USD 50 billion, with USD 20 billion coming from 3G. The USD 50 billion represents a USD 13 billion increase on 2008, and could account for up to 1/5<sup>th</sup> of global telecom capex this year.
- China's 3G investments in 2009 comprise:
  - China Mobile's announced RMB 58.8 billion (USD 8.6 billion) in TD-SCDMA.
  - China Unicom's investment in W-CDMA which BDA estimates at RMB 55 billion (USD 8.0 billion)
  - China Telecom's investment in CDMA 2000 EV-DO which BDA estimates at RMB 20 billion (USD 2.9 billion)
  - China Mobile will continue aggressively investing in its 2G GSM network, with capex of RMB 119 billion in 2009 and RMB 109 billion in 2010. Investments in fixed-line networks and China Unicom's GSM will decline in 2009.
- Huawei and ZTE will be the principal beneficiaries of 3G capex, as they will increase their market share in 2009 to over 40% of the 3G market, vs. 34% of the 2G market last year. Non-China based vendors will win less than 40% of 3G contracts in 2009, down from 65-70% in 2G networks

**Huawei will exceed Alcatel-Lucent to become the third largest telecom equipment supplier in the world in 2009.**

- Huawei is targeting USD 30 billion in contract revenues in 2009, which based on previous year's ratios would be equivalent to an estimated USD 22-24 billion in actual revenue. Alcatel-Lucent is expected to post declining revenues from telecom revenues for 2008 from its USD 18.7 billion in sales in 2007.

**The impact of 3G on China Mobile in the near term is limited given the sheer size of its market dominance**

- 3G and the entry of China Telecom to the mobile market will not have an immediate impact on China Mobile in 2009. China Mobile has over 73% of the mobile market and uptake of 3G will take years to become a material concern.
- China Mobile faces a headache in being the only operator in the world to deploy an unproven TD-SCDMA, particularly in the lack of compelling handsets. But China Telecom and China Unicom will not make much of a dent in China Mobile's stranglehold on the mobile market until 2011. Only Mobile Number Portability (MNP) will stimulate meaningful competition. BDA expects China Mobile to resist MNP fiercely, delaying its implementation until late 2010.
- Competitor China Unicom will be preoccupied with the management challenges of integrating the former China Netcom.
- China Telecom poses a more compelling challenge to China Mobile with its ability to bundle fixed and mobile services and launch EV-DO/WiFi data services as early as this quarter.

**3G demand will be initially driven by data cards for laptops, serving a pent-up demand for broadband wireless access. This presents a short term opportunity for China Mobile.**

- For China Mobile, promoting data cards is attractive as consumers are less bothered about the design of data cards than handsets. MNP is not a factor for data cards, so any delay in its implementation will have no impact on holding back demand.
- Experience in the 3G market in Europe and other markets has shown that Internet access for laptops via data cards is the most compelling application for 3G
- China Telecom can expect to do well with EV-DO data cards, as its 2.5G 1x data cards are already the most popular means of mobile Internet access for laptops.

**In the medium term, 3G will become a battleground for handsets too – revealing huge challenges for China Mobile.**

- To compete on handsets, China Mobile will have no choice but to subsidize handsets. Over USD 1 billion would be required, and subsidies would need to flow to TD-SCDMA customers, handset manufacturers or chipset vendors.
- China Mobile is attempting to counter the threat of an Apple/China Unicom tie-up for the iPhone with the 'Ophone' handset operating system for TD-SCDMA, bundling its own wireless value-added services on an Android platform (but cutting out Google from any involvement) in cooperation with Lenovo, Samsung and LG.
- China Unicom can count on pent-up demand for W-CDMA, which will account for up to 80% of 3G handsets active in 2009. BDA estimates there are already 10 million GSM/WCDMA handset users in China at present, mainly those purchased by consumers in Hong Kong or overseas, or purchased through grey market channels in China. BDA expects 1-2 million of them will become initial WCDMA users in 2009, as China Unicom automatically activates W-CDMA functions in the more than 200 cities it plans to launch in Q4.
- China Telecom will benefit from a fast activation of CDMA 2000 EV-DO and the operator's aggressive promotion on mobile data service. BDA forecasts EV-DO will be available in 100 cities in Q2 2009 and over 300 cities in Q4 2009.

**The economic downturn is already having an impact on China's telecom sector, including reducing monthly mobile subscriber growth and extending the handset replacement cycle.**

- Mobile subscriptions in China will slow markedly in 2009 due to the economic downturn. Net additions will fall to an average of 5.7 million per month, down from 7.9 million per month, or 69 million additions in 2009 down from 94 million in 2009.
- Handset sales will be flat to down in 2009 as consumers replace their handsets less often and there are fewer first-time handset sales. However the market will rebound in 2010 when 3G networks and devices are in place.

**The share of international vendors in China's handset market may shrink from the current 70% to 60% in future as ZTE (and to a lesser extent Huawei) leverage their global handset sales experience to good effect at home**

- Nokia and Samsung can expect to enjoy leading positions in W-CDMA
- Samsung and LG will thrive in EV-DO
- ZTE and Samsung have invested heavily in TD-SCDMA handsets but will see limited returns

based on poor consumer perceptions of the technology.

**China's black market handset sector will shrink drastically in 2009.**

- BDA expects the number of black-market handset manufacturers to shrink by 70% this year due to reduced economic growth at home and in key export markets. The technological barriers presented by 3G will raise the bar above the capabilities of many in the fragmented, poorly capitalized black market handset vendor community.

**Top Trends for China's Internet Sector in 2009**

**China will continue to experience strong growth in Internet users in 2009, taking penetration to 29%.**

- BDA forecasts China's internet users will reach 389 million this year. Internet users in Beijing and Shanghai are expected to reach 11 million and 12 million respectively, giving a penetration of 70% that is close to the US average.

**China's online games market will grow by more than 30% to RMB 25 billion (USD 3.7 billion) in 2009, benefiting from its attractiveness as a cheap form of entertainment and passing the time.**

- Growing Internet users, increasing broadband penetration, longer internet usage time, and aggressive promotions by game operators of new game titles will fuel demand.
- Online games at US 3 – 6 cents an hour are a much cheaper option than a movie ticket, and the interactive nature of the games is compelling to single children, the unemployed and under-employed.

**Online advertising will continue to grow at double-digit rates in 2009.**

- The strong growth in Internet users and the attractiveness to advertisers of the lower costs of online advertising compared to traditional media are key drivers for this sector.
- With declining exports due to the global economic crisis, the emphasis in China is shifting to targeting domestic consumers. The competition for domestic audiences will boost ad spending online.

**Online shopping will benefit from reduced economic growth in China as price-sensitive shoppers go online to compare prices.**

- China consumers use B2C or C2C websites to compare prices as well as save time and expense of travelling to physical stores.
- Online shopping is also creating more job opportunities for the growing number of unemployed who can set up online stores on sites such as Alibaba's Taobao which BDA sees as a major beneficiary. Rivals such as Baidu's online platform Youa will struggle, however, as they lack the brand and payment tool of Taobao.

## Top Trends for India's Telecom Sector in 2009

### **Industry consolidation will continue in India**

Carrier M&A will continue in 2009, both intra-India as regional carriers expand their footprint through acquisitions and in-bound M&A as overseas operators seek to tap into India's growth. Consolidation will continue beyond 2009 as established carriers gain access to additional 2G spectrum, after completing their initial 3G rollouts. However India is likely to remain a highly competitive market place, even at higher levels of tele-density.

### **New mobile carriers will struggle to gain a foothold**

India's newly licensed 2G operators face major challenges including limited access to capital, passive infrastructure, distribution channels and manpower. These have all contributed to delay in the rollout of networks and services. With one year already passed in an initial three year lock-in period, valuation of their sale to an incumbent is now the main question for the new entrants. In the face of intense market competition and lacking established brands, the business case for the majority of these carriers remains unattractive.

### **Internet Access Will Be the Key Driver of 3G in India**

Carriers' 3G offerings will be focused on mundane applications such as browsing and e-mail rather than the often-hyped vision of video streaming and multiplayer gaming. Corporate and professional users will be the early adopters of 3G, so browsing and messaging will dominate 3G usage for the initial few years. For consumers, availability of devices such as iPhones will accelerate the adoption of mobile internet and drive data ARPU.

### **Huawei & ZTE will thrive in India as managed services will no longer be a differentiator for equipment vendors**

European telecom equipment vendors, such as Ericsson and Nokia Siemens Networks have become entrenched with Indian carriers by controlling core 2G networks and, more importantly, offering long term network managed services contracts. With their newly developed managed services capabilities in India, we expect China-based vendors Huawei and ZTE to break this stranglehold, aided by aggressive pricing and vendor financing from government institutions such as the China Development Bank. The credit crunch and the need for carriers to control capex to serve low end subscribers provide an attractive environment.

### **Bundling handsets or Internet access devices with service goes mainstream**

Handset bundling and subsidies will become more prevalent. In India, GSM carriers have stayed away from bundling or subsidizing handsets, although this has been commonplace for CDMA operators. The trend will be evident at both entry-level and professional segments. Bundling will drive customer acquisition for lower end subscribers and offer better device/service integration for corporate users. A similar trend will occur for notebook and PC users as bundled, internet-centric

emerging computing devices are offered at affordable prices for the mass market.

### **Mobile advertising trials will proliferate**

Although digital (online and mobile) advertising made up only 2% of India's total advertising spend in 2008, this represents a doubling on the previous year and this trend will continue in 2009. Contextual and location based targeting will become more commonplace amongst carriers and content developers, publishers, aggregators and mobile portals will also become more active. Despite initial skepticism, some of these mobile advertising based models may well succeed, especially with 3G enabled devices providing better device form factors and an internet-centric user experience, given the clearly established consumer preference for ad-funded content.

### **Direct to Consumer VAS models will remain marginal**

Handset OEMs have long been in the search of a recurring revenue stream, beyond the revenues from an upfront device sale. This has driven a flurry of experimental 'direct to consumer' content sales model to bypass carriers. Majority of these models are yet to launch in India and the rest are grappling with issues of low credit card penetration and viability of alternate payment mechanisms – with control of carriers over billing and user comfort with accessing on-deck content as the biggest bottleneck for success of D2C models. However, the experimentation will continue and may see success in niche areas such as enterprise VAS.

### **Carriers will fight hard to retain high end users ahead of MNP**

Professionals and the youth-segment will remain the most highly sought after segments, especially with the launch of 3G and new GSM rollouts by CDMA carriers. The reason is evident from the revenue breakdown of 2G services: 9% of subscribers in the most developed markets (category A circles) contribute to 29% of revenues and 45% of margins, making this the most valuable segment for carriers. Preparing for the launch of mobile number portability (MNP) later this year, carriers will fight aggressively to retain these customers by offering subsidies on high end handsets, personalized customer service and gifts.

### **TV goes interactive**

The Pay TV market will be increasingly focused on interactive services, following the introduction of new platforms such as DTH. Consumer usage data for near-interactive services on current DTH networks clearly shows that there is pent-up demand for services such as educational games, with families spending up to 20% of their TV viewing time on these services. Wireless broadband and upgraded cable networks will facilitate interactive TV, but capex, affordability and utility of these services will initially restrict the market to limited pockets in urban areas.

### **Rural VAS will be a new focus for carriers**

Rural VAS, especially affordable or ad-supported, local language applications that enhance productivity, will emerge as a key differentiator in service offerings as operators pursue rural expansion more aggressively in 2009. With tariffs already at a low level and margins in rural areas

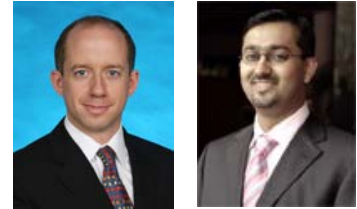
under further pressure from high operating costs, carriers are keen to develop alternate revenue streams. Information-centric contextual applications, such as information about commodity prices, crop and weather data and other local helplines are likely to find adoption in the huge agricultural base in semi-urban and rural areas. Also, development of content in local languages and increasing availability of handsets supporting multiple languages makes the future of rural VAS applications very promising.

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*Duncan Clark, Chairman of BDA*

*Kunal Bajaj, Managing Director of BDA India*

*For comments or questions, please contact [feedback@bdaconnect.com](mailto:feedback@bdaconnect.com)*



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#### **About BDA**

BDA is the leading advisory firm serving companies in Asia's telecommunications, media and technology (TMT) sectors and private equity firms in TMT and other fast-growing sectors. With a track record of 15 years in Asia, BDA has successfully guided the strategies of industry participants and investors since its establishment in 1994. Our teams of China- and India-based professionals are located at the heart of Asia's growth engines and specialize in dealing with challenging regulatory situations and highly competitive markets. For more information about our people, our company, and our services, please visit [www.bdaconnect.com](http://www.bdaconnect.com) or call us in Beijing at +8610 8529 6164.