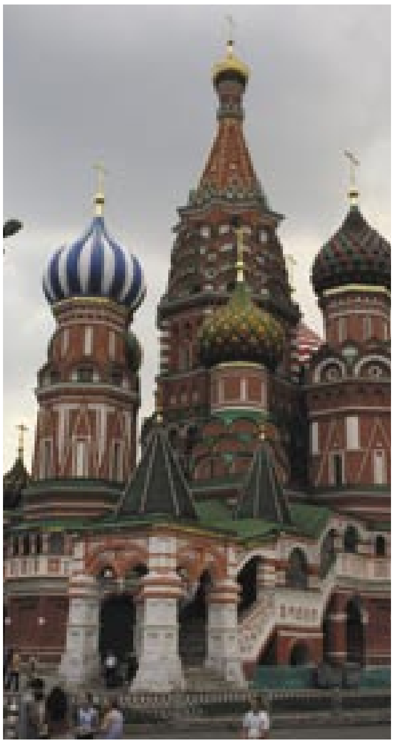
SPECIAL REPORT

BRIC Wireless Markets, the Highlights

LESSONS, OPPORTUNITIES AND CHALLENGES, BY CHETAN SHARMA

6 cities, 5 time zones, 4 countries, 10 days… From the exquisite towering cathedrals in St. Petersburg and Kremlin to serene Stockholm; from a midnight stroll in daylight by river Neva in St. Petersburg to a 4am walk in Gamla Stan (Stockholm); from reading the subway maps in Russian to catching a soccer match in Amsterdam, Wireless World's contributing analyst Chetan Sharma takes a look at the INTEROP conference on "BRIC wireless markets – lessons, opportunities and challenges"…



BRIC, which stands for Brazil, Russia, India, and China, collectively represent the biggest and fastest growing wireless subscriber block. While the sheer volumes represent enormous opportunities for the near and distant future, there are significant challenges and risks associated with these markets as well.

Unprepared and naïve companies have been chewed and spat out in no time. First, let's do the numbers:

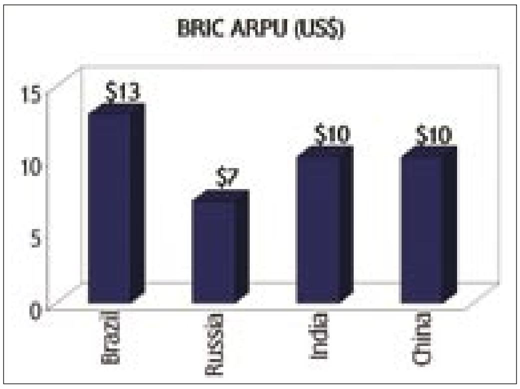
- Over 682m subs by 2005
- BRIC markets will account for over 50% net adds 2005 – 2009

... Net adds – 159m in 2005

- Subscribers – Brazil (87m), Russia (125m), India (75m), and China (393m)
- Penetration – Brazil (46%), Russia (86%), India (6.3%), and China (30%)
- ARPU is low – Brazil ($13), Russia ($7), India ($10), China ($10)
- Data ARPU is low – $0.8 - $1.5

Of course, since Dec 2005, the growth has continued unabated. China surpassed the 400m mark while India crossed the 100m mark and both countries show signs of continued growth. India is on the verge of another surge due to rural network expansion in 2006.

However, both countries have some tough 3G spectrum decisions to take care of – which have been delayed several times – particularly in China, where the government is favouring the controversial TD-SCDMA and carriers opting for standards such as WCDMA. With the Olympics looming in Beijing, this makes for an interesting dynamics.



BRIC markets share some characteristics but are also unique in how they have progressed and in how they should be approached. The primary growth drivers with some degree of variability have been:

- Prepaid dominates
- Pent-up Rural demand
- Market reforms driving the industry
- Competitive pressures on big carriers
- Low-priced handsets
- Some of the lowest infrastructure costs
- Lowest tariffs
- Carriers profitable despite low ARPUs

As highlighted in an earlier report, "Indian Wireless Market", back in May, India and China are adding on an average over 5m subscribers per month. That is in contrast to 5m net subscriber additions per quarter in the US and less than 1m net additions per quarter in Japan and Korea.

With the penetration rate at 12% and 30% respectively for India and China, these nations will continue to add approx 60m subscribers per year for the next 3 – 5 years.

Despite the growing subscriber numbers, pressure on ARPU remains strong and the ARPU has been on the decline in all BRIC countries. Data ARPU for BRIC countries is also small compared to some of the other established markets and is bound to stay that way for the foreseeable future. We will cover worldwide ARPU trends in a forthcoming paper, so stay tuned.

Summary of lessons and observations

- Government participation essential – Unified telecom Policy
- Highly price-sensitive markets
- Data applications used as a churn-prevention tool
- Role of competitive forces and foreign investment is quite important – lowers costs to consumers which stimulates growth
- Low or zero import subsidies on parts or finished goods
- Operators control the value chain
- Operators can lower cost of infrastructure by accepting lower busy-call completion rates
- Revenue-sharing arrangement with vendors vs. pure licensing deals
- Low price demands innovation, participation in local economy
- Network-sharing for rural expansion
- Role for lower frequency bands (450MHz) is important
- Localise data applications
  ... E.g. India – Cricket, Bollywood, Education, etc.
- Significant IP issues especially in China
- Rural markets key to future growth
- Consumer driven markets, Poor Enterprise markets
- Minimal market for foreign application developers
  ... Should partner, acquire, or build-up local expertise
- WiMAX is attractive but cost considerations are more important
- BRIC markets important for infrastructure players, not that much for application developers
- 3G is in planning stages, spectrum issues need to be resolved quickly
- Considerations for other growing markets like Indonesia and US

Overall, BRIC markets represent significant opportunities but they are not for the faint-hearted. Amidst all the talk of BRIC wireless markets, it is easy to forget that US still remains and will remain the highest revenue generating market in the world for some time with close to US$44bn in carrier revenues in 2005, almost twice as much in comparison to the 2nd player – Japan, and twice the revenues generated by the carriers in BRIC countries, combined.

However, the US market presents its own set of challenges and idiosyncrasies. Wireless is doing wonders in BRIC markets and there are tremendous opportunities. WW