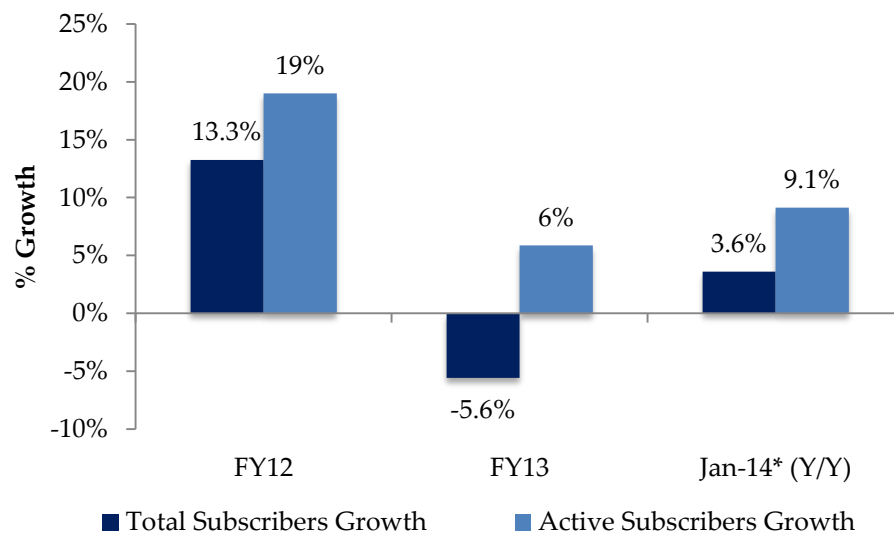


## Indian Telecom Wireless Industry – On a Revival Path

A glorious decade in the new millennium made telecom sector in India the poster-boy of Indian reforms for the magnanimous speed at which it empowered Indians across socio-economic strata. Subscriber base swelled to cover more than 70% of the population as operators tried to woo the market with lowest prices in the hyper-competitive market. Cancellation of 122 licenses by the Supreme Court in the beginning of 2012 on perceived irregularities in the license allocation led to a lull of two years on account of policy paralysis with the widening trust deficit between the government and the players. The period also witnessed game-changing events and trends marked by exit of some of the new players arresting the competition, shift of focus from voice to data, slowdown in subscriber addition, and entry of Reliance Jio in the Indian telecom. Meanwhile, the barometer of growth has shifted from subscriber addition to ability of the operator to leverage the ongoing data explosion in the country.

### Active subscriber growth slows down, beats total subscriber growth

**Total Subscribers Growth Vs. Active Subscribers Growth**



Source: TRAI and CARE Research

The subscriber base expanded rapidly after FY09, fuelled by lower tariff, leading to a huge inactive subscriber base over the years. This expansion was also on account of multiple simcards and the lack of Mobile Number Portability. Subscriber growth was arrested when, in July 2012, operators started

removing their inactive subscriber base as only 75% of the subscribers were active (Peak VLR subscribers as measured by TRAI). As a result, total subscriber base witnessed a decline of 6% in FY13 while active subscribers grew by 6% over the same period, taking the active subscriber composition to 83% in FY13.

CARE Research believes that though the active subscriber growth has slowed down from 19% in FY12 to 6% in FY13 and 9% in January 14 (Y/Y), it will continue to grow in single digit, beating the total subscriber base growth, as the composition of active subscribers in the total subscribers would rise to more than 90% over next couple of years.

### **Financial and Operating Metrics – Moderate growth to continue**

- **Revenue Growth:** Telecom sector revenue has seen a good growth over the last 2-3 years with a peak in growth rate in FY12 and then a subsequent correction in FY13, though there was a fall in ARPU over the years. Growth is becoming more broad-based as compared to the earlier voice-led growth, as the contribution of data revenue is rising at close to double digits led by 2G and 3G data. CARE Research believes that revenue for telecom sector would grow at higher single digit over next couple of years, on the back of data led growth and stabilization of ARPU and increase in per minute realisation. Though there are some concerns of cannibalisation of non-data VAS by the OTT messenger applications, threat to voice revenue from OTT players is over-blown.

### ***Why OTT Voice (or Voice over Internet Protocol – VoIP) is not a serious threat to Indian Voice Telephony in the immediate future***

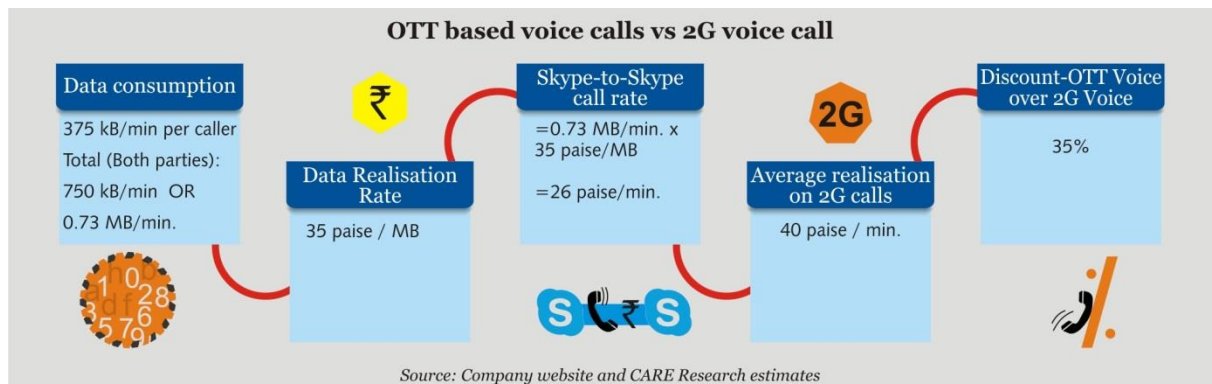
A Skype-to-Skype call consumes around 375 kB/min for one user i.e. 750 kB/min for both users (Source: Skype Website). At an average data realisation rate of 35 paise per MB, it translates into 26 paise per minute as the cost of a voice call on VoIP. If we compare this with average realisation per minute of 40 paise per minutes for voice calls, VoIP using OTT apps translates into a discount of 35% to the regular voice calls.

This 35% discount comes with following perils –

- Regulatory hurdle: Indian Government has limited VoIP calls only to International calls so far. Opening it for domestic voice telephony will face strong opposition from the telecom operators who have invested billions of dollars in the network.
- OTT based voice calls have serious quality related issues due to latency of 1-2 seconds, blank spots and call drops. 3G network in India, especially indoor, is patchy and quality of calls further deteriorates on 2G.

## Industry Update – Telecom Wireless

- Most of the developed countries, where OTT voice is getting popular, have unlimited data packs unlike in India. Lack of such plans results into cost associated with a VoIP call. Also, lesser penetration of smartphones in India would be an issue as VoIP requires smartphones with both the users.
- As the differential between voice call tariff and data tariff of a call on VoIP, operators would not lose much of their revenue even if some portion of the voice telephony shifts to VoIP.



Though it is not a threat to broader voice telephony in the immediate future, OTT voice is expected to threaten National and International Long Distance Telephony because of the tariff arbitrage.

- **ARPU:** ARPUs for both GSM and CDMA have declined gradually over the years on account of two long term trends: (1) Tariffs have fallen to one of the lowest in the world due to increased competition in the sector post 2009 with the entry of new players; (2) New subscribers were mostly low ARPU customers from semi-urban, rural areas or people opting for a second connection, bringing down the overall ARPU. CARE Research expects that ARPUs will see an uptrend going forward riding on higher contribution from data revenue, tariff hikes and reduction in free minutes, removal of inactive subscribers etc.

### Greener Pastures for Telecom Sector

#### ➤ 3G – Growth story is unfolding

Data usage in India is rising sharply. 3G data traffic grew near exponentially in 2012 and 2013 in India primarily after most of the operators slashed 3G tariffs by 70-80% in May 2012. In 2013, 3G subscribers grew by 80-90% Y-o-Y for the leading operators like Bharti Airtel, Idea and Rcom in the recent quarters. CARE Research believes that India is in the growth phase of 3G cycle where subscriptions start growing rapidly from 3rd year of launch of 3G, as experienced in the global markets.

#### ➤ 4G- The Great Indian Broadband Dream

Long Term Evolution (LTE), the most prominent 4G technology, constitutes less than 3% of the global mobile subscriber base of 6.8 billion but has been growing at a phenomenal pace as the subscriber base exploded from mere 11 million at the end of 2011 to more than 200 million at the end of 2013. Worldwide LTE technology is being adopted in 152 countries by 524 operators. 471 operators have made firm deployment commitments in 143 countries, of which 274 operators have launched commercial services in 101 countries. By the end of 2014, total 350 commercial LTE networks are expected to be in place.

After the auction of BWA spectrum in 2300 MHz range in mid-2010, only Bharti Airtel has launched 4G services in India that too in a few select cities. The delay in 4G launches can partially be attributed to regulatory uncertainty, under-developed ecosystem, unavailability of spectrum in the lower frequency range, etc. After adopting Time Division Duplex or TDD based LTE technologies (alongwith Chinese players) for the spectrum in 2300 MHz, few Indian 4G players like Reliance Jio and Bharti Airtel are planning to embrace Frequency Division Duplex or FDD after aggressively buying the spectrum in 1800 MHz in the recent February 2014 auctions. This will reduce the ecosystem challenges expanding the device availability from international markets. Also it will facilitate easier international roaming for 4G subscribers.

#### ➤ Value Added Services (VAS) – Facing the Regulatory Heat

Indian VAS industry has had a dream run with an average growth of more than 40% over last 6-7 year. VAS was expected to take the telecom on fast track growth path until the double-confirmation regulation almost killed the SMS based VAS service in July 2013 and the gradual rise of OTT messaging applications threatening P2P SMS service. CARE Research expects that Indian mobile VAS will keep growing at double digit, though almost at the half the rate of the historical average.

#### Competitive Scenario and Consolidation Trends

Competition in the telecom space in India has subsided after the cancellation of 122 licenses by the Supreme Court in February 2012. The number of players has come down from 14-16 to 8-9 players in a circle. By looking at the global standards of 3-4 players, CARE Research believes that Indian telecom space would eventually be reduced to 5-6 large players with 1-2 regional players. Over the years, subscriber and revenue market share is slowly being consolidated with the top 3 players and the same is being witnessed in spectrum holding. As data revenue contribution is inching towards double digits, competition is swinging towards 'Data' from 'Voice', leading to stabilization of voice tariffs over last few quarters. Entry of Reliance Jio in the 4G space is expected to make the battle for 'Data' pie fiercer, though LTE will take some more time to mature in India. As the market for data itself is redrawing its boundaries expanding rapidly, CARE Research believes that the 2G, 3G and 4G would co-exist in India for few more years.

With clarity on M&A guidelines emerging, the activity is expected to gather momentum as witnessed by the recently announced acquisition of Loop Mobile by Bharti Airtel. Considering that the acquirer has to pay market price for the spectrum of the acquired company if the same is obtained through administered mechanism, CARE Research believes that spectrum will no longer be the driver for consolidation.

Contact:

**Revati Kasture**  
**CGM and Head - CARE Research  
& Grading Services**  
[revati.kasture@careratings.com](mailto:revati.kasture@careratings.com)  
+91-22-6754 3465

**Anand Kulkarni**  
**Manager**  
[anand.kulkarni@careratings.com](mailto:anand.kulkarni@careratings.com)  
+91-22-6754 3527

**Sonali Bhatia**  
**Jr. Analyst**  
[Sonali.bhatia@careratings.com](mailto:Sonali.bhatia@careratings.com)  
+91-22-6754 3562

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