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TRANSMISSION MONTHLY

1. DOT SEEKS LEGAL OPINION ON FEE REFUND

The Department of Telecommunications is again seeking for a legal advice from the Attorney General regarding a refund of entry fee to telecom operators whose licenses were quashed by the Supreme Court. Prior to this the Empowered Group of Ministers (EGoM) decided to offset the amount of only those telcos who win spectrum in the auction.

2. SAMSUNG WINS REVIEW OF ITC CASE AGAINST APPLE

Samsung has meanwhile won another chance to convince US trade agency ITC that iPhones and iPads infringe its patents, with the full ITC bench agreeing to a full review of the early decision in favor of Apple.

3. RIL APPOINTS ARVINDRAO FOR 4G ROLLOUT

The Reliance Industries Ltd. (RIL) -owned Infotel Broadband Services is believed to have hired Arvind Rao, the former Managing Director and CEO of the California-based VAS-firm OnMobile , as Head of Innovation and Platform, according to reports.

Reliance Infotel is the only operator to possess a pan-India BWA spectrum and is likely to launch 4G services in the metro cities of Delhi and Mumbai in the coming year.

The VAS veteran is also expected to play a key role in propelling the firm's yet-to-be-launched service. Rao, however, declined to comment on the appointment when contacted. "I cannot comment on any speculation," says Rao, who had resigned from OnMobile following reports in the media suggesting his involvement in diverting On Mobile's funds to a private account. With an experience of 14 years in the field of wireless telecommunications and emerging technologies, Rao cofounded OnMobile Global Limited in the year 2000 and served as its CEO and MD till July this year. Prior to OnMobile, he served as the Managing Director of Technology Investments at Gilbert Global Equity Partners in New York.

4. SISTEMASHYAM HALVES Q3 LOSS

India's Sistema Shyam Teleservices cut its third quarter loss in half to 4.95 billion rupees (\$89.8 million), from 23% higher revenue of 4.04 billion rupees.

5. NTT CUTS FTTH RATES TO SLOW EXODUS TO LTE

Japan's NTT Com has slashed its prices for FTTH services by up to 34%, in response to slowing fixed-line growth. Sources at the company's subsidiaries blame the slowdown on the growing preference of the youth market to subscribe to an LTE plan exclusively for their data needs.

6. INDIA MAY TEAM WITH NIS FOR SATNAV SERVICES

The Indian government is evaluating a proposal for state-owned BSNL and MTNL to partner with Russia's NIS Glonass to provide satellite navigation services for the Indian market, internal government documents show.

7. TATA DOCOMO TO SHUT SERVICES IN ONE CIRCLE

In a surprise announcement, India's Tata DoCoMo said it will shut down services in the Jammu and Kashmir circle by January 17. The JV blamed the cancellation of its licenses in the circle and two others, plus the prohibitive price it would have needed to pay to win the permits back in an auction.

8. INDIA GSM PLAYERS WANT PART OF 800-MHZ BAND

Indian GSM operators Bharti Airtel, Vodafone and Idea Cellular have written to the department of telecom calling for part of the 800-MHz band – currently used for CDMA services - to be re-purposed for GSM, in light of the “diminishing interest” in CDMA services among local operators.

9. APPLE ADDS 6 SAMSUNG PRODUCTS TO US SUIT

Apple is seeking to add six more Samsung devices, including the Galaxy Note II and Galaxy SIII, to one of its US patent infringement lawsuits against its South Korean rival.

10. BT, ZTE TRIAL XGPON IN UK

The UK's BT has launched a proof-of-concept trial of 10-Gbps XGPON technology - developed with ZTE - for electronics manufacturer Arcol UK. The X in XGPON stands for “tens.”

11. HUAWEI, ZTE OFFER TO SHOW SOURCE CODE TO INDIA

Huawei and ZTE have both offered to provide full access to their source code to the Indian government, to assuage any suspicions over the security of their products. Indian officials are currently examining the implications of the recent US security committee report into the vendors.

12. TATA, TELENOR MAY MERGE INDIAN OPERATIONS

Indian mobile operator Tata Teleservices is reportedly in talks over merging with Telenor's Indian JV to create the nation's fourth largest mobile operator.

Tata and Telenor's Telewings could combine to become a greater competitive force in the market, three sources told *Bloomberg*.

The combined company would have around 120 million mobile subscriptions, putting it in fourth place behind Bharti Airtel, Vodafone India and Reliance Communications.

Japan's NTT DoCoMo - which paid around \$2.4 billion (€1.85 billion) for a 26% stake in Tata Teleservices in 2009 - would likely remain a shareholder in a combined company, according to the report.

But the sources added that a merger hinges on whether new telecom rules, due to be decided on by Indian cabinet shortly, will require a merged company to return start-up spectrum to the government.

Norway's Telenor dissolved its former Indian JV Uninor and found a new domestic partner following the cancellation of its 2G operating licenses earlier this year.

The company was one of only five to apply to take part in an auction to reallocate parts of the seized spectrum, and was the biggest spender in a bidding process muted by high reserve prices.

13. TATA MUST PAY SMS TERMINATION FEES TO VODAFONE

India's telecom dispute tribunal has told Tata Teleservices to pay a .05 rupee (\$0.001) termination fee for every SMS sent to Vodafone India's network until an interconnect dispute between the operators is resolved. Vodafone is demanding a .10 paisa fee, while Tata is resisting.

14 0.24 MILLION GSM SUBSCRIBERS ADDED IN OCTOBER 2012

According to recent data released by Cellular Operators Association of India (COAI), India added 0.24 million GSM subscribers in the month of October 2012, taking the GSM subscriber base to 671.91 million. This reflects a 0.04% increase from previous month.

Airtel added the maximum number of new subscribers, i.e. 0.49 million – taking its user base to 186.41 million. It is followed by Vodafone, which added 0.48 million subscribers taking its user base to 153.15 million. Idea added 0.24 million users and its user base has reached the 115.70 million mark. Aircel added only 0.18 million new subscribers, taking its user base to 66.79 million. While BSNL didn't gain any new subscribers, Uninor lost 1.10 million users taking its user base to 41.04 million.

15. RAJASTHAN HC ORDERS RELOCATION OF MOBILE TOWERS FROM SCHOOLS, HOSPITALS

In a judgment that could have nationwide impact, the Rajasthan high court on Tuesday ordered the relocation of mobile towers from educational institutions, hospitals and playgrounds in the state within two months, citing harmful electromagnetic radiation. The court further ruled that the towers should be shifted at least 500m from jails and 100m from monuments.

"We have received a large number of communications from the state and across the country that mobile tower radiations are harmful and even the inter-ministerial committee of the central government in its meeting in May this year has held so," a division bench of chief justice Arun Mishra and Justice N K Jain observed in its 200-page judgment.

16. DEBT RIDDEN TULIP TELECOM STRUGGLES TO PAY ITS EMPLOYEES

Caught in a vicious circle of debt, enterprise telecommunications services company Tulip Telecom BSE 0.54 % is struggling to pay its employees, a far cry from two years ago when founder-chairman Hardeep Singh Bedi was confident of sales touching \$1 billion (Rs 5,500 crore) by 2014.

With analyst estimates for fiscal 2014 sales ranging between 3,000 crore and 3,300 crore, the billion-dollar dreams will have to wait, much like scores of employees in Tulip's Bangalore-based data centre subsidiary who received their August salaries a few days ago and continue to wait for their September and October paychecks.

17. APPLE CONTINUES TO LEAD THE TABLET MARKET WITH 55% UNIT SHIPMENT SHARE IN Q3 2012

According to a recent report by ABI Research, Apple's share of the tablet market continued to best all others with 55% unit shipment share in Q3 2012. However, in spite of maintaining its lead for 10 straight quarters, competition from tablets powered by Google's Android OS continue to eat away at Apple's success. Since the launch of iPad in 2010, fifty-five percent is the lowest share Apple has ever had. As per the report, following Apple in shipment share this past quarter were Samsung, Amazon, and ASUS.

18. DISAPPOINTED WITH RAJASTHAN HC ORDER TO MOVE MOBILE TOWERS: COAI

The GSM operators body COAI, is disappointed by the Rajasthan High Court's order. The Rajasthan High Court has ordered that mobile towers be moved away from educational institutions, hospitals, and playgrounds in the state within two months, citing the hazards of mobile tower radiation. *"The industry will determine the future course of action following a detailed study of the High Court order which is awaited. While we remain sensitive to the concerns of citizens and our customers, we reiterate here that the EMF emission safety norms prescribed by the Government of India cover all citizens, including children and patients. We are fully compliant with these safety norms and will continue to work with the Government of India to ensure continued compliance with the pertinent laws and safety norms set out for the industry,"* Mathews added.

It is pertinent to highlight that the Government of India has recently adopted the most stringent safety guidelines for electromagnetic field (EMF) exposure, at 1/10th of the ICNIRP standards. This is considered to be the safest in the world and the fact that the Industry is fully compliant with the new exposure norms. Over 90 per cent of the countries of the world have adopted these ICNIRP standards. With the further reduction of these ICNIRP norms by the Government of India in 2012, over 98 per cent of the countries of the world now have EMF emission safety norms above that of India.

19. IPHONE 5 GETS ACCESS LICENSE IN CHINA

The iPhone 5 has received a network access license from China's Telecommunication Equipment Certification Center, leading to speculation China Telecom and/or China Unicom could launch the device in a matter of weeks.

20. WINDOWS 8 FAILING TO LIFT PC SALES: NPD

Research firm NPD Group estimates that sales of Windows-based PCs for the three weeks following the October 26 launch of Windows 8 declined 21% year-on-year, suggesting a tepid debut for Microsoft's new OS.

21. VODAFONE INDIA LAUNCHES VODAFONE SECURE DEVICE MANAGER FOR CORPORATES

Vodafone India announced the launch of Vodafone Secure Device Manager for corporates. Vodafone India is the first Indian telecom operator to launch this unique and innovative solution which acts as a simple and flexible tool to keep the data on smart phone & tablets secure, helping business grow without the fear of data security.

22. BHARTIINFRA TEL IPO TO OPEN ON DEC 11

BhartiInfratel Ltd, the mobile-tower-arm of the country's top telecom carrier Bharti Airtel Ltd. (Mumbai: BHARTIARTL) announced today that its Initial Public Offering (IPO) will open on December 11 for the investor's bid and close on December 14.

The company hopes to raise funds to the tune of INR 44,961 million (US \$825 million) through this public issue. It is offering 188.90 million shares of INR 10 each at a price band of INR 210 to INR 240 a share. The shares will be listed on the Bombay Stock Exchange and National Stock Exchange.

This will be the largest offering in the country in the last two years, after the \$3.43-billion IPO was launched by Coal India in November 2010. This will also be the first IPO from the group in the last ten years after the Bharti Tele-Ventures IPO was launched in January 2002. The move will enable Bharti to become the first tower company to be listed on the Indian stock exchange. In the past, diluted value of tower firms has resulted into a "wait and watch" approach from telecom companies to launch the IPOs of the tower firms.

The IPO had been in the pipeline for quite some time, and was getting delayed due to unstable market conditions. The issue had been the assigned a 4/5-grading by the credit rating agency, Crisil, indicating that the fundamentals of the issue are above-average relative to the other listed equities securities in the country, informs the company.

BhartiInfratel has around 34,000 mobile towers in 11 of the country's 22 operation zones, and also holds a 42-percent stake in Indus Towers, which has over 1-lakh towers in the country.

23. TELECOM COMPANIES TO BE CHARGESHEETED FOR EXCESS SPECTRUM DURING NDA REGIME

The Supreme Court today directed the CBI to go ahead with its outgoing Director A P Singh's view on the prosecution of telecom companies, their officials and public servants on the allocation of excess 2G spectrum during the NDA regime when late Pramod Mahajan was the Telecom Minister.

24. TELENOR'S NOT KEEN ON NEW PARTNERS IN INDIA: CEO JON FREDRIK BAKSAAS

Norwegian telecom firm Telenor is not scouting for new partners in India, chief executive Jon Fredrik Baksaas has said while announcing that the company expects to reach break-even in the country a year ahead of schedule by the end of 2013.

In a press conference in Delhi on Thursday, Baksaas did not comment specifically on whether the firm's Indian arm - Telewings Communications - would merge with Tata Teleservices, but said, "We have a partner, we have a structure and rest is speculation."

News agency Bloomberg reported on Thursday that the two companies were in talks to

combine operations in India. Sun Pharma's executive director SudhirValia had bought 26% equity in the new entity through Lakshdeep Investment and Finance last month.

25. DOT TO CONSULT TRAI OVER IMPOSING UNIFORM LICENCE FEE ON ISPS

The telecom department (DoT) has sought sector regulator Trai's views on the thorny issue of levying a license fee on internet service providers (ISPs) at 8% of their annual revenue from April, 2013, officials familiar with the matter told ET.

The telecom disputes tribunal (TDSAT) had last month dismissed DoT's plans to impose a uniform license fee on ISPs following an appeal by the industry body representing ISPs, which had argued that such a government move would sharply inflate the cost of internet services and undermine the country's dismal broadband penetration levels.

26. SPECTRUM SALE: DOT TO SELL UNSOLD, REFORMED AIRWAVES IN NEXT AUCTIONS; GOVT SCRAMBLES TO MEET ITS TARGET

The telecom department (DoT) plans to simultaneously sell unsold spectrum from the recently concluded auctions along with a portion of airwaves held by existing operators such as Bharti BSE 2.12 %Airtel, Idea Cellular BSE -2.31 % and Vodafone in the 900 MHz frequency before March 31, 2013, as the government scrambles to meet its target of raising 40,000 crore from the sale of airwaves in the current fiscal.

The Empowered Group of Ministers (EGoM) on spectrum was slated to discuss this proposal on Thursday, but the meeting was postponed to Friday. If the group headed by Finance Minister P Chidambaram approves this plan, the next round of auctions will see GSM airwaves in two different frequencies - 1800 MHz and 900 MHz - as well as CDMA spectrum in the 800 MHz band all being put up for sale at the same time, said a DoT official.

The inter-ministerial panel will also take a call on allowing GSM companies to bid for airwaves in the 800 MHz band that has traditionally been reserved for CDMA-based services in India. Recently, the chief executives of Bharti Airtel, Vodafone and Idea Cellular had demanded that the government reduce the reserve price for 800 MHz frequency and allocate a part of it for GSM-based services in line with global trends.

While the government's record of completing auctions on time is not very good, it will be keen to finish the sale process in the current fiscal and avoid the ignominy of missing its airwaves sale target by a wide margin, which in turn would have a negative impact on fiscal deficit. The Supreme Court has also expressed its displeasure with the government for not putting all the cancelled airwaves on sale in the first round of auctions.

27. IPHONE 5 LAUNCHING IN 50 COUNTRIES IN DEC.

Apple has confirmed it will launch the iPhone 5 in more than 50 new countries this month, starting in South Korea.

In anticipation of the device's South Korean debut, regulators are meanwhile instructing operators not to offer excessive subsidies on the device, in violation of local law.

Apple yesterday announced that the iPhone 5 will go on sale in South Korea this Friday.

The following Friday, the device will debut in 34 more countries, including China, Indonesia, Malaysia, the Philippines and Taiwan. On December 21, the iPhone 5 will be available in a further 20 markets including Vietnam.

28. VERISIGN TLD AUTHORITY RENEWED

The US Department of Commerce has renewed VeriSign's authorization to oversee the .com domain through to 2018, but has stipulated that the company will have to seek approval if it wishes to raise prices for registering domains.

29. INDIA CELLCOS CHALLENGE ORDER TO PULL TOWERS

The lobbies representing India's GSM and CDMA operators have teamed up to challenge a court order that would require cellcos to remove all mobile towers close to schools and hospitals in the city of Rajasthan. Operators fear the case could provoke similar action in other cities.

30. TELENOR LIKELY TO PULL OUT OF MUMBAI BY JAN.

Telenor's Indian unit will shut down its operations in circles in which it has not won back spectrum by January 2013, according to group CEO Jon Fredrik Baksaas. This means it is likely to pull out of Mumbai and Kolkata.

31. NOKIA HIRES 55-PIECE ORCHESTRA FOR RINGTONES.

Nokia has hired a 55-piece orchestra to record 25 new ringtones, in response to market research indicating that phone users have a preference for classical music ringtones.

32. INDIA INACTIVE SIM CLEANUP MAY HIT ACTIVE SUBS.

Indian regulator Trai has called for consultation over whether legitimate mobile customers are being caught up in operators' efforts to disconnect inactive subscribers and purge them from their books.

33. BHARTIAIRTEL LAUNCHES 24X7 EMERGENCY ALERT SERVICE

Bharti Airtel has launched a 24X7 'Emergency Alert Service' that will enable its subscribers to send alert message with location details to 10 mobile numbers. Airtel subscribers can now use this alert service during an emergency to send an alert with their geographic location to their closest 10 loved ones simultaneously with just a call.

34. RELIANCE INDUSTRIES SET TO LAUNCH 'MIFI' DEVICES TO BRING 4G CLOSER TO MASSES

Reliance Industries BSE 1.50 % (RIL) will launch 'MiFi' devices that will allow smartphone and tablet users to access high-speed internet on the go from their existing devices and enable speedy adoption of its services when it kicks off its much-awaited fourth generation (4G) offerings in mid-2013, said company executives.

The company is expected to first roll out 4G services in Delhi and Mumbai. Company officials and vendors confirmed that the task of laying fiber optic cable networks has begun in these cities.

It has also entered into contracts with Ericsson and Samsung for building networks, with Microsoft for providing security solutions and with IBM for IT integration.

35. SUPREME COURT STAYS TDSAT'S ORDER THAT REMOVED CAP ON NUMBER OF SMSES

The Supreme Court today stayed telecom tribunal TDSAT's order, which had quashed the sector regulator TRAI's circular limiting the number of SMS's to 200 per day per SIM.

In a brief hearing, a bench headed by Justice G S Singhvi stayed the tribunal's order and issued notice to late Bal Thackeray's grandson Aditya on whose plea TDSAT had passed the order.

The apex BSE 0.00 % court passed the order on an appeal filed by TRAI challenging tribunal's order and asked Thackeray to respond to regulator's plea within six weeks.

With today's stay order, the sector regulator can enforce the circular till the apex court vacates its stay on the verdict by the Telecom Disputes Settlement and Appellate Tribunal (TDSAT).

36. DOT TO LOWER RESERVE PRICE IN 4 CIRCLES

The Department of Telecommunications (DoT) will lower the reserve price of 2G spectrum in four circles — Delhi, Mumbai, Rajasthan and Karnataka — and complete the auction in this financial year.

37. FREE ROAMING FROM MARCH 2013

The Department of Telecom (DoT) is likely to direct the telecom operators to abolish roaming charges from March 2013. The telcos are citing a revenue loss of 10 percent and an inevitable tariff hike with the move.

38. TELCOSTO ROLL OUT WIFI IN 2013: RUCKUS

Wi-Fi solutions company, Ruckus Wireless Inc. (NYSE: RKUS) believes that the coming year will witness an increased adoption of Wi-Fi solutions by the service providers in India.

"Right now 80 to 90 percent of our revenue is coming from the enterprise business but this will change. The telcos have been evaluating all vendors and now they are ready to roll out networks. I think the carrier Wi-Fi market can cross the enterprise market in size because each of the tier I operators are talking in multiples of 100,000 hotspots to be rolled out across the country," Sudarshan Boosupalli, General Manager - India and SAARC Operations, Ruckus Wireless told *Light Reading India*. The Indian operators are considering WiFi for data offload. They are hampered by scarcity of available spectrum operators and they need an offload strategy as they experience increasing volumes of data traffic on their networks, and using WiFi as an alternative data access method makes sense as the popularity of WiFi-enabled smartphones is increasing.

The Indian telcos are planning to follow a dual strategy-of setting up their own WiFi network and also form partnerships with vendors like Tikona Digital Networks Pvt. Ltd.

and Spectra net. For instance, Idea Cellular Ltd. is planning to roll out its own WiFi network. Ruckus believes that it would be a combination of both the strategies.

However, Wi-Fi rollout is not without issues. Unlicensed WiFi band in India is closer to 3G band and experts believe that it is going to cause the issue of interference.

39. DOT TO TEST MOBILE LOCATION

The DoT intends to launch a pilot project to test a new technology which helps in locating a lost or cloned cellphone on a real-time basis. The department will use the technology developed by TelcoTV to locate mobile phones in real-time.

40. TRAI ASKS MOBILE OPERATORS TO TEST QUALITY OF DATA SERVICES

To ensure that mobile operators meet quality of service benchmark for wireless data, telecom regulator the Telecom Regulatory Authority of India (Trai) today asked them to put in place a test set-up comprising of servers and test probes covering their entire service area for different data services.

The regulator said mobile operators are required to meet quality of service benchmarks in respect of parameters such as activation of data services, successful data transmission download or upload attempts from a test server, minimum download speed from a test server covering all tariff plans and data drop rate.

41. OUTLOOK NEGATIVE FOR INDIAN TELCOS: FITCH

Indian operators could be in for another rocky year in 2013, according to a report from Fitch Ratings, which has assigned the entire sector a negative outlook.

In a special report, Fitch warned that high competition and controversial changes to spectrum allocation policies will likely weaken the credit metrics of most operators next year.

The top four operators by revenue – Bharti Airtel, Vodafone India, Idea Cellular and Reliance Communications – will have to pay significant one-off charges for their “excess” spectrum above 4.4-MHz, under a government policy cleared by cabinet last month.

Combined, the four operators are in for an estimated 310 billion (\$5.69 billion) in excess spectrum fees. Fitch said it believes operators will have to pay the fees next year.

Fitch added that the remaining four private telcos are likely to remain squeezed by large capex needs, weak balance sheets and, for some, debt incurred by re-acquiring their licenses at significantly higher prices following the decision to revoke the permits early this year.

State-owned BSNL and MTNL are meanwhile expected to continue to suffer operating losses due to high staffing costs and low ARPUs.

Fitch does not expect the widely-anticipated consolidation within the sector to reduce overcapacity, meaning it thinks the market will stay too competitive for any sustainable rise in tariffs.

While there are likely to be only nine industry participants by the end of 2013, down from at least 13 at the start of 2012, Fitch believes that the sector can profitably sustain six players at most.

Also needing to shift will be average revenue per minute. The sector has the lowest average rates of anywhere in the world, at a mere 0.42 rupees (\$0.008), and Fitch said this is unsustainable.

Fitch predicts that the top four operators will record only a marginal growth in their ebitda margins, and revenue growth of only low single digits in 2013. While voice will remain the chief driver of revenue growth, data's contribution to revenue is expected to double to up to 9%.

42. APPLE-GOOGLE AKIN TO FEUDING NATIONS: SCHMIDT

Google executive chairman Eric Schmidt has compared the relationship between his company and Apple to that of nation states, capable of maintaining trade relations while still having disputes. The analogy has been compared to the Cold War by some pundits.

43. CHINA MOBILE TO OFFER TD-SCDMA LUMIA 920

Nokia has reached an agreement to provide TD-SCDMA variants of its flagship Lumia 920 smartphones for China Mobile. The deal could help Nokia gain market share in China, and help China Mobile compensate for its lack of a deal to carry the iPhone.

44. NFC SET BACK TWO YEARS BY IPHONE 5 SNUB

Juniper Research believes Apple's decision to eschew a dedicated NFC chip in the iPhone 5 has set the technology back two years in the US and Western Europe.

45. APPLE LAUNCHES ITUNES STORE IN INDIA, BOLLYWOOD MOVIES NOW AVAILABLE

Apple has launched the iTunes Store in India offering consumers the ability to purchase music, buy or rent movies. The store lets users browse and buy songs, albums and films. Until now, the Indian iTunes Store only featured some free books and podcasts. But now, users can buy Bollywood songs, Tamil film songs to even international music from all major labels.

Apple also launched its iTunes Match service in India, which allows users to store music, bought from sources other than iTunes, in iCloud. This service is priced at Rs 1,200 per year. But, there are no TV shows listed, unlike various other international markets.

46. VIDEOCON TO ROLL OUT 4G SERVICES IN 2013

Indian Telecommunications industry now has one more player in the Long Term Evolution Time Division Duplex (LTE TDD) arena with Videocon Telecommunications Ltd. planning to launch 4G services in the coming year.

The company recently won spectrum in six circles: Gujarat, Haryana, Madhya Pradesh, Chattisgarh, Uttar Pradesh (East), Uttar Pradesh (West), Bihar and Jharkhand. Since the spectrum is paired and liberalized, Videocon has decided to use the same to roll out LTE services. Videocon Mobile Services is planning to roll out complete 4G products &

services across the newly won circles in 2013, says the press release issued by the company.

The company was earlier not perceived to be a serious player. It was assumed by most of the telecom industry watchers that Videocon will exit the segment once its licenses were cancelled in February this year. However, the company decided to participate in the recently concluded 1800 MHz auction.

The coming year is likely to see an increased action in the LTE TDD space with a number of operators planning to launch 4G services. Reliance Industries Ltd. (RIL) , which is the only player to hold pan-India Broadband Wireless Access (BWA) spectrum is also planning to launch 4G services in the coming year.

Besides RIL, Aircel Ltd. is also planning to launch 4G services in the coming year. Bharti Airtel Ltd. is the only player which has launched 4G services. The company is gearing to expand the services in metro cities of Mumbai and Delhi now.

Tikona Digital Networks Pvt. Ltd. , which has Broadband Wireless Access (BWA) spectrum in five circles, is preparing for commercial pilots of its 4G services in the coming year. In an exclusive interaction with *Light Reading India*, the company's Chief Marketing Officer, Heramb Ranade, says that the company is evaluating the ecosystem of Long Term Evolution (LTE) and is aiming to launch the 4G services latest by early 2014. Tikona indicated that the full city pilots will be done in the city of Jaipur in Rajasthan.

The rollout of new networks will give a fillip to the telecom industry which is currently grappling with a number of issues.

47. OPERATING ON A EVERY DAY, EVERY WEEK BASIS: SISTEMASHYAM

Telecom operator Sistema Shyam Teleservices, whose licenses expire in January, is operating on a "every day, every week basis" even as the company is awaiting the Supreme Court decision on the curative petition.

"There is a Plan A, but no Plan B. We came here as per government's invitation. We need to understand what the way is out. At this stage, we see there is sympathy that we can continue, we need to see how," Sistema Shyam Teleservices (SSTL) President and CEO Vsevolod Rozanov told reporters on the sidelines of Telecom Leadership Forum, 2012.

He added that there is no panic situation in the company and it is working on an "every day, every week basis". "The solution lies not with me but with people who do policies. It is a regulated sector," he said.

A joint venture between Russian conglomerate Sistema and Shyam Teleservices, SSTL's 21 licenses were among the 122 licenses quashed by the Supreme Court in February. The licenses of the company, which operates under MTS brand, are valid till January 18, 2013, as per the Supreme Court order.

The company has filed a curative petition before the Supreme Court seeking restoration of its licenses. The petition was filed on May 4 this year but has not been listed for hearing till date.

The company has consistently maintained that being a pure play CDMA operator, its legal case is significantly different compared to other mobile operators. "There are 16 million customers, 7,000 jobs and three lakh retailers. There is a significant number of data customers that we have. It is a humble appeal to the government and the court that there is speedy resolution to the matter because we are coming close to January 18 and no one knows what to do," he added. Talking about reports of SSTL being engaged in discussions with another operator for a potential acquisition, Rozanov said there are no such plans.

"The key thing that we are focusing on now is ensuring business continuity. I don't have any other task now. If our licenses are cancelled, then all the other things will be irrelevant." If I am unable to serve my customers after January 19, it doesn't matter what kind of opportunities I have. If we are not able to operate then it makes no sense," he said.

To continue its operations, the company was required to participate in the recent spectrum auction. However, the company did not participate in the auction. Rozanov, however, said that the company may participate in the CDMA auction if the government fixes the reserve price at 2008 level. The government plans to conduct another auction of CDMA spectrum till March end as there was no bidder for these airwaves in the recent sale.

48. MAXIS COMMUNICATIONS WON'T EXIT AIRCEL, EYES SISTEMA JV

Malaysian tycoon T Ananda Krishnan will remain a sizeable minority investor in the Indian mobile telephony company Aircel Communications as he discusses an investment deal with Russia's Sistema JFSC.

Vladimir Yevtushenkov led Sistema could become a majority or the largest minority shareholder based on its fresh equity investment in Aircel, which carries an enterprise valuation of \$6-7 billion, said sources directly briefed on the matter. Maxis Communications, which holds 74% stake in Aircel, will not sell off Aircel.

The talks with Sistema center around an investment deal and not a buyout of Aircel, sources close to the development told TOI.

49. WITH NO LICENSES, TELENOR, VIDEOCON, TATA TELESERVICES TO LOSE 10 MN USERS ON JANUARY 18

Millions of mobile phone users in India may have to look for new service providers with three telecom operators likely to switch off their networks from January 18. However, the imminent network shutdown offers a window of opportunity for other operators to pick up these subscribers.

Telecom operators Telenor, Videocon and Tata Teleservices, which collectively have about 10 million subscribers in the circles where their licenses expire next month, are among the nine telcos whose mobile permits were cancelled by the Supreme Court in February this year in the 2G-spectrum allocation case. The affected operators have permission to use their allocated spectrum till January 18.

In a recent re-run of the auction, Norway's Telenor was able to secure airwaves in only six circles, excluding Mumbai, Kolkata and West Bengal where it has nearly 7.5 million customers.

Similarly Videocon, which managed to retain permits in six regions, will have to shut down GSM operations in 11 circles including the key markets of Mumbai, Maharashtra, Tamil Nadu, Kolkata, Kerala, Karnataka, Andhra Pradesh and Rajasthan, which together account for its nearly 1.7 million users.

The count of affected subscribers is based on end-October data provided by the Cellular Operators Association of India (COAI).

Tata Teleservices, which chose not to bid again for the CDMA airwaves it held in the loss-making zones of Assam, the northeast and J&K, will disconnect services to nearly 300,000 subscribers in these areas.

50. APPLE IPAD MINI LAUNCHED IN INDIA

After the launch of iTunes store in India, Apple will launch the iPad Mini in India today. It comes in both Wi-Fi and Wi-Fi cellular models. The Wi-Fi only iPad mini will be available for Rs. 21,900 for a 16 GB model.

51. APPLE STOCK TAKES A BEATING

Li's comments are thought to be one of several factors blamed for the biggest single-day loss in Apple shares in four years during Wednesday's trading. Other factors were predictions that Android devices will continue to eat into iPad sales, and news that Nokia had beaten Apple to the punch for a handset deal with China Mobile.

52. GIGABIT FIBER CAN'T MEET FULL POTENTIAL

Some tech experts trialing Google's 1Gbps consumer fiber service in Kansas City have been disappointed to learn that server-side and other bottlenecks mean individual download speeds rarely touch their full potential.

53. APPLE, SAMSUNG BACK IN COURT OVER \$1B DAMAGES.

Apple and Samsung are back in court in California, with Samsung seeking to have the \$1.05 billion damages bill awarded by a jury significantly reduced, and Apple arguing its rival should have to pay over \$500 million more.

54. BHARTI INFRATEL LOOKING AT ACQUISITION OPPORTUNITIES

Telecommunications tower company BhartiInfratel, whose Rs 4500-crore IPO is opening on December 11, today said it is looking at acquisition opportunities in India and overseas.

The company, which is the tower unit of telecom major BhartiAirtelBSE -0.71 %, is set to launch its initial public offering (IPO) on December 11 to raise upto Rs 4,533.60 crore.

"We will be looking at any acquisition opportunity which comes our way," Bharti Infratel Chairman Rakesh Bharti Mittal told reporters on the sidelines of a roadshow for its IPO. He, however, did not divulge details on whether any specific companies are being considered for the acquisition.

The IPO comprises 18.89 crore equity shares and would open for retail investors in a price band of Rs 210 to Rs 240 per share. The issue will close on December 14.

55.2G AUCTION: EGO M SLASHES BASE PRICE 30% FOR UNSOLD SPECTRUM IN 4 CIRCLES

The panel of ministers on spectrum has reduced the base price for unsold airwaves in four regions - Delhi, Mumbai, Karnataka and Rajasthan - by 30%, and approved the telecom department's plan to simultaneously sell these airwaves along with a portion of spectrum held by incumbent operators before March 31, Telecom Minister Kapil Sibal said on Friday.

The Centre had failed to attract even a single bid for 2G airwaves in the 1800 MHz band in these four regions in the recently concluded sale process. The auctions turned out to be a damp squib, with the Centre getting less than a fourth of its revenue target of 40,000 crore as there were no takers for about 57% of the airwaves put on sale. Sibal said the government would hold another round of auctions in the current financial year, where unsold 2G airwaves in the four regions, as well as airwaves held by incumbents in the 900 MHz band in Delhi, Mumbai and Kolkata, would be sold simultaneously. He also said the EGoM headed by Finance Minister P Chidambaram did not take a decision on the pricing of CDMA spectrum in the 800 MHz band.

56. FOREIGN INVESTORS PRESS INDIA OVER 2G PERMITS

With the January 18 deadline for the cancellation of Indian 2G licenses looming closer, foreign participants in the nation's telecom market have ramped up their legal wrangling to salvage their investments.

Russian conglomerate Sistema has pledged to follow through with threats to seek billions of dollars in compensation via international arbitration, unless India agrees to reinstate Indian JV Sistema Shyam operating licenses before the annual Indo-Russian summit commences on December 24.

The company has written a stern letter to the external affairs and telecom ministries, warning that the issue is likely to dominate the summit – and could ultimately harm Indian-Russian trade relations - unless the situation is amicably resolved, *Economic Times* reported.

Sistema Shyam and eight other operators stand to lose their licenses to operate 2G services on January 18 next year, once the court's decision to cancel the 122 2G licenses allocated during 2008 finally takes effect.

India's minister of state for communications and IT has meanwhile revealed that five other foreign investors besides Sistema have filed legal notices seeking settlements of the dispute under bilateral investment treaties.

These include Malaysia's Axiata and its two Indian investment units – which are investors in Idea Cellular – as well as Telenor's Asian unit and several foreign investors in Loop Telecom.

The minister said the Department of Telecom has convened an inter-ministerial group to develop a co-ordinated response to the legal notices and any settlement claims.

57. VOLTE HALVES TALK-TIME BATTERY LIFE

LTE's battery drain is a significant issue for early adopters, but more integrated chips and other innovations are improving the situation. However, as carriers start to roll out VoLTE, they may take another step backward, since the 4G voice technology can slash battery life in half.

This is the finding of a study by Metrico, a division of testing company Spirent Communications, which compared talk-time battery life on CDMA and LTE. Its tests involved calls in two major US markets, using a smartphone capable of running both CDMA and VoLTE (voice over LTE) – presumably the network was that of Metro PCS, one of just three cellcos in the world which currently supports commercial VoLTE. Its only VoLTE device at present is the LG Connect 4G.

“The device's estimated battery life was reduced by 50%, or about 252 minutes of talk time, when voice calls were placed over the LTE network, compared to voice calls placed over the CDMA network,” says the report.

Its author Ardeshir Ghanbarzadeh, director of services development at Metrico, said: “The significant difference in current drain between VoLTE and CDMA technologies for voice calling applications suggests further optimization of devices supporting VoLTE calls is needed in order to give end users talk-time battery life expectancy levels similar to that of 3G devices.”

Such findings will be a blow to carriers like Verizon Wireless, which wants to migrate users as quickly as possible from 3G to LTE-only networks. Since these will no longer be able to fall back to traditional circuit-switched 2G/3G voice, such carriers will be looking for vendors to address the battery drain issue in time for their winding down of 3G, or risk subscriber frustration.

58. FDI IN TELECOM FALLS TO INR 2.3 BN IN FY 2013

The foreign direct investment (FDI) in the country's telecom sector fell to INR 2.3 billion (US\$43 million) in the April-September period of the fiscal year 2012-13 due to the economic slowdown, according to experts. FDI was a huge INR 103 billion (\$1.9 billion) in the year-ago period.

59. USA-WIDE FIBER ROLLOUT WOULD COST GOOGLE \$140B

Goldman Sachs has estimated it would cost Google \$140 billion to cover the whole of the USA with the 1Gbps fiber service it is trialing in Kansas City - or \$70 billion to cover even 50 million households.

60. MAXIS ALLOCATES \$164M FOR LTE ROLLOUT

Malaysia's Maxis has revealed it is on the verge of launching LTE services, and plans to invest 500 million ringgit (\$163.7 million) rolling out its 4G network over the next three years.

The operator last week secured the required 2,600-MHz spectrum – along with seven other players - in an allocation by the Malaysian Communications and Multimedia Commission.

In a press statement, Maxis CEO Sandip Das said the imminent launch will be the culmination of years of preparation.

“We have been trialing 4G LTE for two years and conducting extensive LTE interworking tests in a live network environment using commercial devices,” he said.

Maxis in July signed a deal with Redtone International to share LTE infrastructure and spectrum.

At the time, the operators revealed plans to commence LTE services early next year, starting in the Klang Valley.

Maxis already had a RAN sharing deal in place with U Mobile prior to reaching its agreement with Redtone. U-Mobile and Redtone both also secured 2,600-MHz spectrum during this month's allocation.

Sandip said the operator believes that “network sharing is key to the deployment of networks faster across the country, while optimizing industry investments and avoiding duplication.” He said the companies between them have “a strong suite of LTE spectrum.”

61. UK MAKES NEXT MOVE TOWARD 4G

UK regulator Ofcom yesterday opened the door for carriers to apply to take part in its auction of 4G spectrum, but the details of which firms stepped through the portal won't be known until the year end.

Ofcom gave a tight window of opportunity for carriers, giving them just six hours to submit their application. Those that did were required to provide a deposit of £100,000 (\$161,000), and their suitability to take part in the auction will now be assessed by the regulator. Checks will include checking the accuracy of information supplied by the carriers, and ensuring there is no overlap in the applications.

The auction is scheduled to begin in January; however Ofcom chief executive, Ed Richards, says the application process means it has “fired the starting gun on the 4G auction process,” and pledged the technology will “drive significant improvements to mobile broadband availability across the UK.”

Informa Telecoms and Media principal analyst Thomas Wehmeier predicts the auction will raise “just a fraction of the record £22.5 billion spent during the 3G licensing round in April 2000,” due to the tough economic climate now facing operators relative to the millennium.

62. ONLINE TABLET MARKET OUTPACES MOBILE MARKET BY 3 TIMES: SNAPDEAL STUDY

A recent study conducted by Snapdeal.com revealed that in the online space, mobiles and tablets are the most searched and most bought products in India. The study conducted on the Online Shopping Trends observed in the Mobiles and Tablets category is based on the sales and traffic seen on Snapdeal.com over a period of three months (July 2012 – September 2012).

According to the study, 80% of the mobiles sold online were priced below Rs 5,000 and 95% of the tablets sold were below Rs 10,000. Some other key findings from the study are:

Trends show that customers now prefer Smartphones versus Feature Phones with Smartphones accounting for 23% of the online market share on Snapdeal.com

The top 5 Mobile phone brands are Micromax, Nokia, Samsung, Sony Ericsson and HTC. In the low price (<Rs 10,000) Tablets category, Micromax has emerged as the clear leader with the brand's Funbook range being the highest selling as well as the most searched tablet on Snapdeal.com.

Indian Tablets brands like Zync, Penta and Intex are now finding greater acceptability amongst the online shoppers on Snapdeal.com

Almost 50% of the sales of Mobiles and Tablets came from consumers' residing in Tier-I cities. Growth in Tablets market outpaced the growth in Mobiles market by 3 times with Tablets sales growing at the rate of 33% month-on-month as compared to Mobiles sales growth at 11% month-on-month

Symbian (46%) and Android (44%) were the most preferred operation systems in mobile phones. Camera is no longer an ancillary feature in mobile phones. The sale of mobile phones with cameras grew by a 100% while that of mobile phones without cameras dropped by 32%.

Android is the most preferred OS in Tablets with a market share of 94%.

63. GOOD CHANCE A CHEAP IPHONE IS COMING: JEFFERIES

A Jefferies analyst believes there to be a "good chance" that Apple will launch a low-cost, pre-paid iPhone for emerging markets – particularly in Asia – by June next year.

64. AIRTEL PREPARES LTE IN NIGERIA

Indian cellcos Airtel is preparing to extend tests of 4G in Nigeria, after completing a trial of LTE in Lagos, the African nation's largest city.

The cellcos local business, Airtel Nigeria, claims the Lagos trial is the first test of 4G in the country, and it is now gearing up for further trials in cities including Abuja and Port Harcourt. Airtel Nigeria achieved maximum download rates of 37-Mbps in the trial, with peak upload rates of 10.6-Mbps.

65. SPRINT SAID TO EYE REMAINDER OF CLEARWIRE

Sprint Nextel is reportedly in talks to acquire the 49% of Clearwire it does not yet own, in the midst of Sprint's acquisition by Japan's Softbank in a \$20.1 billion deal.

66. INDIA'S TIKONA PLANS CUT-RATE 4G PRICES

New Indian market entrant Tikona Digital plans next year to launch 4G mobile broadband services in the regions it has licenses at rates as low as 0.02 rupees (\$0.0004) per MB, which could trigger a 4G data price war.

67. GOOGLE MAPS NOW AVAILABLE IN APPLE APP STORE

Google has announced the roll-out of Google Maps across the world in the Apple App Store. Daniel Graf, Director and Google Maps for Mobile, stated: "The Google Maps app shows more maps on screen and turns mobile mapping into one intuitive experience. It's a sharper looking, vector-based map that loads quickly and provides smooth tilting.

68. MOBILE VOIP USAGE POISED TO CLIMB

Analyst firm Juniper Research predicts a billion mobile users will utilize over-the-top (OTT) mobile VoIP services by 2017, however monetizing that rise may prove difficult.

The research firm notes the rise in OTT mobile VoIP users will be a dramatic shift in the way voice traffic is carried. Market drivers include an increase in the number of traditional telcos getting on the OTT bandwagon, improvements in network technology, and greater competition in the market.

However, analyst Anthony Cox notes making money from the rise could be tough. "Many subscribers sign up to an OTT service without ever planning to pay a cent for it, and some industry players do not have a short-term revenue model at all," he says.

One way specialist mobile VoIP companies hope to address the monetization problem is by opening their application programming interfaces to third parties and mobile network operators. Players are also offering increasingly sophisticated service offerings.

69. NATIONWIDE MOBILE NUMBER PORTABILITY BY FEBRUARY NEXT YEAR: KAPILSIBAL

Telecom Minister Kapil Sibal today said nationwide Mobile Number Portability (MNP) is expected to be rolled out by February next year, which will allow users to retain their numbers even if they move from one state to another. "For the timely implementation of the National Telecom Policy (NTP) 2012, the Department of Telecom has finalized broad agenda for next three months from December 2012 to February 2013," Sibal said at the 'India Telecom 2012' here. Some of the key initiative in course to be completed by February 2013 is approval of spectrum assignment and pricing, unified licenses regime, M&A guidelines, finalization of guidelines for spectrum sharing, creation of fund for R&D and manufacturing and of course, MNP on a nationwide basis, he added.

70. GOVERNMENT TO AUCTION SPECTRUM HELD BY TELCOS IN 900 MHZ BAND, SAYS TELECOM SECRETARY R CHANDRASHEKHAR

Government will auction the spectrum being held by incumbent GSM operators in 900 MHz band whose license are coming up for renewal in November 2014, Telecom Secretary R Chandrashekhara said on Thursday.

They will, however, be allowed to hold 2.5 MHz in each circle in the same band even after expiry of their licenses after a paying a market-determined price.

"As far as 900 MHz is concerned, auction is entirely because of renewal of licenses not because there is any spectrum available at the moment. This is likely to become available in November, 2014 and the auction is being conducted now," Chandrashekhara said on the sidelines of India Telecom 2012.

Government is working on conducting auction of spectrum in 900 MHz band during this financial year, but it is yet to decide on the final date for auction.

The efficiency of 900 MHz is around two-time more than 1,800 MHz band, for which the government had fixed a base price of Rs 14,000 crore for 5 MHz pan-India spectrum in the recent auction.

Telecom operators prefer 900 MHz band as they need to deploy less telecom towers compared

71. ABOUT 57,271 VILLAGES YET TO CONNECT WITH MOBILE TELEPHONY

About 57,271 villages in the country are yet to be connected with mobile services, as per the survey carried out by TERM Cells of Department of Telecommunication," Minister of State for Communications and IT Milind Deora said in a written reply to the RajyaSabha.

BSNL has planned to provide connectivity to technically feasible uncovered villages with basic telephone facility by March 31, 2013, he added.

Of the 57,271 villages, Odisha had the highest number of villages uncovered by mobile services (6,734), followed by Chhattisgarh (5,460), Maharashtra (5,394) and Jharkhand (5,308) and Uttar Pradesh (5,013), he said.

72. TELENOR MAY BID FOR MUMBAI CIRCLE

Norwegian telecom operator Telenor plans to bid for 2G spectrum in the Mumbai circle, where it had lost its licenses after annulment by the Supreme Court, in the proposed second round of auctions before the end of the current fiscal.

"There is most likely a new auction coming in the first quarter of next year. We will, of course, be looking at that, at least for one of our circles, Mumbai, where we currently have our operations," the company's India managing director, SigveBrekke, said at a press conference in Fornebu on Friday.

73. GOVERNMENT EXPECTS 20,000 CRORE FROM NEXT ROUND OF SPECTRUM AUCTION

India expects to earn 20,000 crore from the second round of auctions which will be held before March 31 next year even after the base price of the airwaves to be sold has been reduced by 30%.

"At this base price, we would expect approximately 20,000 crore for the entire spectrum in 1800 MHz and 900 MHz that is put on the auction block," telecom secretary R Chandrasekhar said Friday.

74. CHINESE COMPANY SECOND BIGGEST SIM CARD SUPPLIER IN INDIA

A Chinese company has emerged as the second biggest supplier of SIM cards for mobile phones in India this year. The government-controlled Eastcompeace Technology is supplying the phone chips to Reliance Communications, Tata Teleservices Airtel and Vodafone, besides providing SBI with smart cards.

75. 'UNIQUE' MOBILE PENETRATION IN INDIA AT 25 PERCENT: GSMA

IN A SPEECH AT INDIA TELECOM 2012, ANNE BOUVEROT, DIRECTOR GENERAL OF GSMA, said, "*Mobile penetration in India, based on connections, stands at 72 per cent and this is forecast to rise to almost 100 per cent by 2017. Meanwhile, the penetration of unique mobile subscribers is currently at 25 per cent and is set to increase to 39 per cent at the end of 2017.*"

76. ANONYMOUS HACKERS HIT BSNL'S WEB SITE

India's largest fixed line telecoms operator Bharat Sanchar Nigam Limited (BSNL) has been breached by a hacker group, which is demanding for the withdrawal of section 66A of country's IT Act, which limits citizens' freedom of speech and expression.

77. IPHONE 5 GETS COOL RECEPTION IN CHINA

Apple's launch of iPhone 5 received a frosty reception in China, with only two Apple fans lining up outside Beijing's flagship Apple store on Friday morning to buy the device, thanks to the snowy weather in the capital city

78. VERIZON EXPANDS 100G NETWORK IN EUROPE

US Telco Verizon has extended its European 100G network by 2,600-km during 2012, as traffic demand continues to grow in the region. The operator has added two new routes between London, UK, and Paris, France, that, when combined with an existing network between Paris and Frankfurt in Germany, have created a ring of 100G networks.

Kyle Malady, senior vice president of global network operations and engineering at Verizon, says the resulting increase in capacity and efficiency will help the Telco meet growing "video traffic, LTE 4G growth and cloud usage."

The firm's 100G network will also enable it to consolidate transport traffic and offer fixed and mobile services on a converged core network, a statement reveals. Verizon hasn't forgotten its home market, however, with its 100G network in the US extended by 20,921-km during 2012.

79. UK'S EE GEARS UP FOR 4G CHALLENGE

UK cellco EE is seeking to consolidate its early mover advantage with an expansion of its 4G network, a leading Informa Telecoms & Media analyst says. The operator last week revealed it will add 17 new towns and cities to its current 4G network in March, taking total coverage to 35 towns. The firm is the first to launch a commercial 4G service in the UK, after being granted permission by regulator Ofcom to refarm its existing 1800-MHz spectrum, but will face increasing competition next year after a full scale auction of 4G frequencies.

80. SDN REVOLUTION ON ITS WAY

Software defined networks (SDNs) are now essential for telcos to keep pace with increasingly dynamic applications and services, research firm Ovum claims. The firm believes traditional network architectures are struggling to keep up as the market changes from a three-tier hierarchy of access, aggregation and core, to flatter architectures.

“SDN has already had a major impact on the communications industry by providing a focal point for a revitalized interest in networking,” notes David Krozier, principal analyst in Ovum’s Network Infrastructure Telecoms team.

According to Ovum, virtualized application software is already replacing network appliances, while infrastructure is becoming more programmable. “SDN provides an opportunity to completely reexamine network architectures, introduce virtualization, and provide truly innovative solutions,” Krozier says.

81. IN OCTOBER 2012, BROADBAND SUBSCRIBER BASE IN INDIA REACHES 14.81 MILLION

According to latest TRAI data, the total broadband subscriber base in India has increased to 14.81 million in October 2012 as against 14.68 million at the end of September 2012, there by showing a monthly growth of 0.89%. Yearly growth in broadband subscribers is 14.10% during the last one year (October 2011 to October 2012). The telephone subscriber base in India has decreased to 935.18 million at the end of October, 2012 as against 937.70 million at the end of September 2012, thereby registering a monthly growth rate of -0.27%. The urban subscriber base has decreased from 595.69 million in September, 2012 to 590.73 million at the end of October, 2012. During the same period, subscription in rural areas has increased from 342.01 million to 344.45 million.

At the end of October 2012, the total wireless subscriber base has decreased to 904.23 million, registering a monthly growth of -0.26%. Wireless subscription in urban areas decreased from 571.70 million in September 2012 to 566.81 million at the end of October 2012. During the same period the wireless subscription in rural areas increased from 334.92 million to 337.42 million. Out of the total 904.32 million wireless subscribers, 703.92 million were active on the date of Peak VLR for the month of October 2012. The proportion of VLR subscribers is approximately 77.85% of the total wireless subscriber base reported by the service providers. At the end of October 2012,

the wireline subscriber base declined to 30.95 Million as against 31.08 million at the end of September 2012. Net reduction in wireline subscriber base was 0.14 million.

82. SPRINT NEXTEL TO BUY REMAINING CLEARWIRE SHARES FOR \$2.2B

Sprint Nextel agreed Monday to acquire the nearly 50% stake in Clearwire that it did not already own for about \$2.2 billion, an important step for the mobile carrier as it continues its big turnaround campaign.

83. APPLE SELLS 2M IPHONES IN CHINA IN 3 DAYS

Apple says it sold more than two million iPhone 5s in China in their first three days of availability, setting a record for that market.

84. RIM SENDS OUT BLACKBERRY 10 LAUNCH INVITES

RIM on Monday sent out press invites for its BlackBerry 10 global launch event. The Canada-based handset maker will officially unveil BlackBerry 10 to the public Jan. 30, 2013.

85. AIRTEL'S VOICE ARSENAL FOR 4G SUCCESS

Bharti Airtel Ltd. (Mumbai: BHARTIARTL) is evaluating Circuit Switched Fall Back (CSFB) technology to ensure voice capability in its 4G services. The sources close to the developments have confirmed the news to *Information Week India*.

Through CSFB option, the company would be able to offer voice to its LTE subscribers through its 3G and even 2G network. This is particularly significant since 4G networks are largely used for carrying out data services. With CSFB, the network can transfer the users to 3G or 2G network during voice or video calls. Bharti has launched 4G services in three locations, Kolkata, Pune and Bengaluru, in India.

The move will also give Bharti, a competitive edge over its arch rival, Reliance Industries Ltd. (RIL) which has an all India BWA spectrum and expects to launch 4G services in the coming year. Reliance is exploring Voice-Over-LTE technology to offer the voice capability in its 4G network.

86. UNINOR TO SHUT OPERATIONS IN WEST BENGAL

The telecom service provider Uninor has decided to shut its operations in Kolkata and West Bengal circles from January 19, 2013, where it could not get spectrum in the recently-concluded 1800-MHz auctions.

"With no new 1800-MHz spectrum auctions being indicated by the authorities and the 900-MHz spectrum also not likely be available to auction winners in 2013, Uninor will have to stop its operations in the two circles of Kolkata and West Bengal on January 19, 2013," the company says in a statement.

The company statement adds that due to the same Supreme Court order, it will cease its operations in 12 other circles where minimal obligatory roll-out had been conducted to meet license conditions from January 19, 2013. It, however, will continue to operate in

the Mumbai circle as the company is still evaluating the possibility of participating in the second auction for spectrum in Mumbai, as indicated by the government.

The closure will impact jobs of the company's employees in the circles of Kolkata and West Bengal. Uninor adds that some employees may be given the option of relocating to other circles. It will also hire placement agencies to assist affected employees get new job opportunities. The company says it has suspended the supply of new SIM cards and recharges in the two circles with immediate effect.

Uninor has a total subscriber base of 5.6 million in the two circles of Kolkata and West Bengal, of which 57 percent are active on VLR as reported by the Telecom Regulatory Authority of India (TRAI) (October 2012).

87. TIKONA CLOSES OPERATIONS IN 13 CITIES

Broadband service provider Tikona Digital Networks has shut operations in 13 of 38 cities as part of, what it calls efforts to consolidate coverage.

"We have chosen to consolidate and expand our coverage and capacity in the top six metros and 19 Tier-I cities, making us the leading broadband operator in the top 25 markets of the country in respect of coverage, capacity and share of new additions," Tikona said in response to an email query.

88. LETTING GSM OPERATORS BID FOR UNSOLD CDMA SPECTRUM: A BENEFICIAL STEP

The department of telecom is considering a demand by India's top three mobile phone companies – Bharti Airtel, Vodafone and Idea Cellular -- to allow GSM operators to bid for unsold CDMA spectrum in the 800 MHz band which saw no takers in the recent auction.

If this happens, the government as a first step will realign the existing block of 800 MHz spectrum -- now earmarked for CDMA operators -- and make it part of the international 900 MHz band used by GSM carriers worldwide, signaling a decisive shift in India's spectrum harmonization policy.

The impact of this on the Indian telecom sector is going to be huge and India's GSM operators would be on Cloud Nine. Harmonization of the 800 MHz (locally known as CDMA band) with the international 900 MHz band would give India's GSM carriers access to higher frequencies in the 800 band (880-890 MHz) which have better reach and are ideal for sprucing up 2G, 3G coverage at lower costs and launching HSPA+ mobile broadband services.

89. TWITTER CROSSES THE 200 MILLION ACTIVE USERS MARK

On Tuesday, popular micro-blogging network Twitter announced that it has crossed the 200 million active users mark. A tweet from the official Twitter account said, "There are

now more than 200M monthly active @twitter users. You are the pulse of the planet. We're grateful for your ongoing support!"

90. CHINA MOBILE LAUNCHES DUAL-MODE 4G IN HK

China Mobile launched its converged FDD/TD-LTE network in Hong Kong Tuesday, as the mobile carrier moves closer towards a nationwide rollout of TD-LTE next year, but did not say when it will start selling service packages.

The anticipated converged 4G network integrates China Mobile Hong Kong's current FDD/LTE network with the home-grown TD-LTE technology operating on the 2300-MHz band that the operator acquired in February.

At the commercial launch in Hong Kong yesterday, China Mobile Hong Kong demonstrated a live seamless bi-directional LTE FDD/TDD interworking via the converged network. China Mobile also made a video call to the TD-LTE network in Shenzhen, using the ZTE dual-mode FDD/TD-LTE handset.

91. JUDGE REJECTS APPLE'S REQUEST FOR SAMSUNG BAN

Apple has been dramatically rebuffed by a California judge after its request for a US sales ban on a number of Samsung smartphones was turned down in the California court where a jury awarded it \$1.05 billion in damages for patent infringement in August.

92. SAMSUNG DROPS APPLE BAN BID IN EUROPE

Samsung Electronics said it would drop law suits aimed at banning the sale of Apple products in Europe, just a day after scoring a victory in a battle in the United States with the maker of iPhones.

93. TELENOR PAYS 33% OF THE BID PRICE

The Norwegian-operator Telenor has paid 33 percent of the bid price for the recently-concluded 2G airwaves, following the Department of Telecommunications 's rejection to offset the entry-fee paid by its former joint-venture partner Unitech in the 2008 auctions

94. GOOGLE MAPS FOR IPHONE TOUCHES 10 MILLION DOWNLOADS IN 2 DAYS.

Within 2 days of its launch at the app store, the newly released Google Maps for iPhone has been downloaded more than 10 million times. Soon after its release last week, the Google's Maps app quickly jumped to the top free app on the App Store.

95. DOT TO IMPOSE ONE-TIME SPECTRUM FEE FROM JANUARY 1 DESPITE PROTESTS

Despite vehement protests from mobile phone companies, the department of telecom (DoT) will implement its decision to impose the one-time spectrum fee on existing telcos from the beginning of the coming year.

Internal DoT documents reviewed by ET reveal that the department will soon issue a circular informing telcos that the recent decision of the Union cabinet on charging a one-

time spectrum charge, both prospectively and retrospectively, on incumbent GSM telcos, will come into effect from January 1.

96. TELECOM OPERATORS PROPOSE TO SET UP 29,700 TELECOM TOWERS FOR 3G SERVICES IN THE NEXT TWO YEARS.

According to the Minister of State for Communications and IT, Milind Deora, there is a proposal to set up 16,526 towers for 3G services in the year 2012-13 and about 13,174 towers in the year 2013-14.

97. RIL TO GET APPROVAL FOR 4G VOICE TESTING

The corporate-giant RIL is set to receive an approval from the Department of Telecommunications to test its voice services on its forthcoming 4G network. The telecom department has recommended that the company should be allowed to test 10,000 connections for 4G voice services and should also be given these many mobile numbers.

98. VOLTE TESTED ON THE LIVE SWEDISH LTE NETWORK

Tele2 AB today announced that Tele2 is the first operator in Europe to have tested voice over LTE (VoLTE) in the live Swedish Tele2 LTE network. The tests proved much better voice experience in the IP based LTE network compared to 2G and 3G networks.

The tests have been conducted in a fully end-to-end standards compliant manner using technology from Mavenir Systems and Nokia Siemens Networks implemented in the live LTE network in Sweden.

VoLTE technology improves voice quality significantly and enables much faster call setup times.

99. ZAIN TOGETHER WITH HUAWEI TO BUILD NATIONWIDE CONVERGENT GSM UMTS LTE NETWORKS IN KUWAIT

Huawei, a leading global information and communications technology (ICT) solutions provider, and Zain, a pioneer in mobile telecommunications in eight markets across the Middle East and North Africa, today announced the successful launch of a commercial LTE 1800 MHz network that covers the entire country of Kuwait. The network is the largest of its kind in the region and marks a major step for the development of the region's mobile broadband market.

Zain and Huawei expanded their LTE partnership after the successful deployment of GSM and UMTS networks in Kuwait. On November 21, Zain launched LTE services under the banner of "Wiyana Connect LTE", a newly-built LTE network that realizes Circuit Switched Fallback (CSFB) as a LTE voice solution and achieved download speeds exceeding 90 Mbps.

The new LTE network also enables a wide variety of high-performance mobile applications and multimedia, including video conferencing, high-definition content transmissions, high-speed video downloads, and social networking platforms. These

mobile services, made possible by both the existing GSM/UMTS and new LTE networks, provide Zain's subscribers with a superior mobile broadband experience.

100. VIOM MULLING IPO LAUNCH

Viom Networks, a telecom-tower company, plans to launch the process for its IPO from January 2013, reports *The Economic Times*. The announcement has come after BhartiInfratel's recent IPO launch which was the first from any tower company. Viom is the jointly-owned arm of Tata Teleservices and SREI.

101. EMPLOYEES QUESTION UNINOR'S DECISION

Uninor's employees in Kolkata and West Bengal circles have urged the Norway government to investigate the company's decision to close operations in the two circles from next month. Employees claim that Uninor's business was profitable in these circles and they have questioned the company's logic for not bidding for spectrum in West Bengal and Kolkata.

102. PLAN PANEL FOR AUDIT OF SPECTRUM USAGE, REFRAMING OF AIRWAVES

The government needs to audit spectrum usage and reframing of airwaves to ensure efficient utilization of the natural resource, the 12th Five Year Plan document has said.

The 12th Plan (2012-17) said a "significant amount of additional spectrum" would be needed with the introduction of new technologies, high bandwidth applications and increasing user base.

"While effective spectrum planning in this regard needs to be carried out, the requirement of spectrum in 60 GHz and above bands for all backhaul purposes, audit of spectrum usage and reframing of spectrum to ensure the efficient utilization should also be taken into account during the 12th Plan Period," it added.

Under reframing of spectrum, telecom operators with 900 MHz airwaves will have to give these up and bid for the less efficient 1800 MHz at current prices.

These telcos will be allowed to retain 2.5 MHz spectrum in the 900 MHz band, but that will also have to happen at auction determined prices.

The 12th Plan targets provision of 1,200 million connections, mobile access to all villages and increase rural teledensity to 70 per cent, broadband connections of 175 million by 2017.

It also envisages making available additional 300 MHz of spectrum for IMT services and making India a hub for telecom equipment manufacturing by incentivizing domestic manufacturers with thrust on IPR, product development and commercialization.

103. BSNL FLOATS FRESH TENDER FOR NETWORK EXPANSION IN WEST ZONE.

BSNL has issued a fresh tender for procuring telecom equipments in its zone after Indian Telephone Industries (ITI) Limited did not participate in the earlier offer due to various issues.

"We had to float fresh tender for 63 million lines to complete our Phase 7 network expansion. ITI was offered to supply these equipments but they did not take it up," a senior BSNL official told PTI.

After a gap of five years, BSNL floated a 14.37 million line tender to expand its network capacity and part of it was given to ITI for equipment supply under reservation quota.

When contacted ITI, Chairman and Managing Director KL Dhingra said: "ITI did not participate in the tender as ITI could not get ToT (Transfer of Technology) partner."

"We had been allotted an order as reservation quantity of 6.39 million lines West Zone of BSNL. This project was not commercially viable due to low volumes and highly competitive prices quoted by L1 bidder," he further said.

Chinese firm ZTE had emerged as L1 bidder in the tender and was awarded major portion of this tender and along with Alcatel Lucent, which was selected for supply of equipments for building an intelligent network for BSNL.

BSNL has offered other firms, who were in the fray for equipment supply, to match the price at which ZTE has agreed but none of the companies accepted the offer citing very low price quoted by the Chinese firm, industry sources said.

The BSNL official said supplies have started for Phase 7 network expansion and expect to complete all the supplies within estimated cost of Rs 4,000 crore.

104. SISTEMATO CONTINUE SERVICES AFTER JAN 18

The Russian-operator Sistema has informed its subscribers that it will continue with its services after the deadline of January 18, 2013. The Telco, with a subscriber base of 16 million, has said that it is taking further steps to continue its services in circles where its licenses were quashed by the Supreme Court.

105. SAMSUNG GALAXY SERIES SELLS 10 MILLION UNITS.

SAMSUNG, the mobility giant of Korea, in this competitive era has sold 10 million units of GALAXY series of smartphones in India.

In June 2010, the company first launched this series in India with GALAXY S. After that, the company kept on adding a number of smartphones in this range. A variety of 13 smartphones are available in GALAXY portfolio.

There are no reports of sales figure but GALAXY Y series, Note series and S III together recorded sales of 50 percent.

The GALAXY series ranges from Rs. 6,800 to Rs. 40,000.

106. TELECOM COMPANIES FOCUS ON DATA OFFERS TO WOO YOUNG CUSTOMERS.

Indian mobile operators are aggressively wooing the youth with low-cost data tariff plans and freebies as they bet on increased data use by youngsters to revive their sagging profits.

Aircel, owned by Malaysian telecom firm Maxis, for instance, now offers free talk time for each purchase made at online shopping portal Yebhi.com, while Reliance Communications has tied up with Facebook and Whatsapp for monthly plans at rock-bottom prices.

The top three players, Bharti Airtel, Vodafone India and Idea Cellular have tied up with RIM to offer BlackBerry instant messaging service at 129 a month to college students, a massive discount over the handset maker's actual tariff plan.

"Young people spend more time on mobile phones consuming data than consuming voice," Bharat Bambawale, global brand director at Bharti Airtel said. "They hardly ever speak to anyone on a paid call and would use Whatsapp or BlackBerry Messenger to keep in touch with their friends," he told ET.

107. DOT MAY PROPOSE SEEKING TRAI VIEW ON CDMA AUCTION

The Department of Telecom (DoT) may propose to a ministerial panel next week to either seek sectoral regulator Trai's views on auction of telecom spectrum in the CDMA band or auction the radio waves after GSM spectrum auction due this fiscal. "It has been discussed that for 800 Megahertz band (CDMA spectrum) there can be two scenarios. First, refer it to Trai for making recommendations and second, hold auction of spectrum in 800 MHz band in succession to the forthcoming auction of 1800 MHz and 900 MHz band (both being used for GSM services)," an official source said. The proposal will go to an Empowered Group of Ministers (EGoM), headed by Finance Minister P Chidambaram, for final decision only after approval of top authorities at the Telecom Ministry.

EGoM is likely to meet sometime next week. On December 7, DoT has sought EGoM's decision on action to be taken in the matter of 800 MHz spectrum but it was deferred by the panel.

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