

Russian Satellite
Communications Company

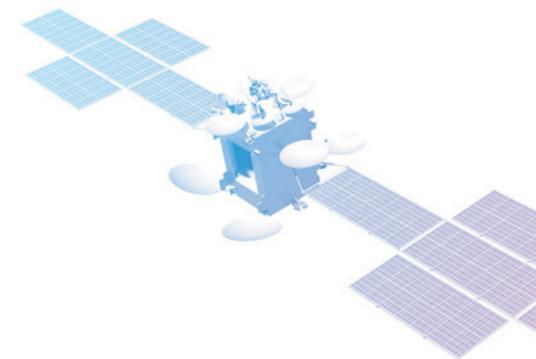
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Russian Satellite
Communications Company



The World is United
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Sources: ComNews.ru, Vedomosti.ru, Kommersant

❖ RSCC Confirmed Launch Date

Russian Satellite Communications Company (RSCC) will launch its Express-AT1 and Express-AT2 broadcasting satellites on March 4th, 2014. Meanwhile, RSCC is developing a contingency plan to use the capacity of DirecTV-1R satellite as back up, until Express-AT1 is firmly settled. According to RSCC's calculations, the new satellite will become operating until the end of March 2014.

Initially, the new satellites were scheduled to be launched last year, but deadlines were extended to the 4th quarter 2013 due to engineering problems faced by Reshetnev Information Satellite Systems (manufacturer of these satellites).

Then following the crash of Proton-M booster carrying three Glonass-M satellites in July, the launch of AT1 and AT2 was postponed indefinitely.

AT1 (56 degrees E) and AT2 (140 degrees E) satellites will provide up-to-date telecommunications, TV, and data services to the Urals, Eastern and Western Siberia. "Express AT1 capacity leased by the largest Russian direct broadcasting satellite operator Tricolor TV will allow to triple the number of channels in the "Siberian" package, bringing it in line with the offerings already available from this operator in the country's western and central regions", says a joint press release from RSCC and Tricolor TV. ❖

❖ Moscow Metro Upgrades Cellular Communications

Moscow Mayor's office is working on a development plan for the mobile network in the metro. The first step will be reducing charges for access to the underground infrastructure. Draft proposals may be tabled for Mayor Sergey Sobyenin's review before the end of 2013. Moscow IT Department suggested that service providers and metro administration should join forces to develop a strategy for expansion of cellular services in the metro in 2014-2018. The authority expects that by the end of 2014 95% of the metro premises (stations, tunnels, rolling stairs) will be covered by mobile second generation (2G – GSM), third generation (3G, UMTS) and fourth generation (4G, LTE) networks.

At this point, according to the IT Department, commuters are dissatisfied with the quality of mobile services underground: in 2013

complaints of low quality of reception in the metro registered by the authority was up by 12.5% from last year.

A source in a mobile company revealed that these initiatives came as a feedback from the government to the November petition from MTS, MegaFon and VimpelCom. Among other issues, operators complained to Mayor Sobyenin about high charges for access to the metro infrastructure. They lamented that construction of networks in the underground had virtually stopped. All projects were frozen in July 2011, when the metro administration blew up charges for access to their infrastructure.

According to a source in the city government, the IT Department accepted operators' arguments and proposed to calculate economically justified and non-discriminatory tariffs which could give a new impulse to mobile infrastructure in the metro. ❖

❖ **Subscribers Are Ready To Pay More For 4G**

Russian subscribers are ready to pay more for high speed mobile Internet, but they would use it to make free calls among other things, concluded a research by Accenture consultancy.

25 percent of smartphone owners in Russia aren't satisfied with the speed of mobile data services, and this figure is typical for other emerging countries as well, says Accenture's study Mobile Web Watch. The share of subscribers who are ready to a surcharge for dramatically faster mobile Internet services is a sequence higher than the share of those displeased with the existing quality of data services: 83 percent of smartphone holders. But even more respondents (87

percent) would use faster mobile Internet to make free calls via Skype, Viber or Google Talk (the so called OTT services).

Accenture's research covered 31,000 consumers from 26 countries of the world, including 1,500 from Russia. The share of users ready to a surcharge for higher data speeds is higher among Russians compared with other emerging countries (76 percent), and well above the figures registered in the more developed markets (57 percent). 34 percent of Russians are open to a 10-20 percent surcharge, and 26 percent more are ready to a surcharge up to 10 percent. Accenture analysts calculated that 47 percent of Russians either already make voice calls over mobile Internet, or will start doing it in the next year. ❖

❖ **Auction For LTE Frequency Postponed**

The new auctions of frequency spectrum to develop LTE (4G) in 55 regions of Russia won't be announced at the upcoming meeting of the State Commission for Radio Frequency (SCRF). A source close to SCRF revealed that a consensus panel decided to postpone the auction of spectrum in the 2570-2620 MHz band. The plan was to auction off four 10 MHz lots in 55 regions, including Saint Petersburg. According to our source, it has been found out that in some regions the frequency in question is occupied by MMDS operators. Ministry of Communications and Mass Media has confirmed this information.

The 2.5-2.7 GHz spectrum is suitable for LTE TDD (4G). So far, the frequency to develop LTE in Russia was allocated to the Big Four telecom operators, Scartel, Osnova Telecom and Vaynakh telecom in Chechnya. New auctions could be interesting to regional mobile operators along with a number of companies who have long aspired to get into the mobile market, such as Transtelecom and Summa Telecom. ❖

❖ Subscribers Choose WiFi

Fast and free WiFi is becoming a good alternative to mobile Internet for smartphone owners. In 2013, share of smartphone holders who use them to go online was up to 81 percent, against 67 percent in 2012, revealed a study by Deloitte. But the share of mobile operators in all connections to the Internet reduced over the year from 71 to 59 percent. Therefore, penetration of mobile Internet among users of smartphones remained unchanged – about 48 percent, and the growth in Internet users is attributed to WiFi connections. In 2013, 75 percent of all smartphone connections to the Internet over smartphone were made through WiFi, compared with 61 percent in 2012, says Deloitte's report.

According to Sergey Borisov, an analyst from Accenture, these figures border upon truth. There are two reasons to this trend, he explains, - price and speed. WiFi is free of charge almost everywhere in Russia, while the speed of mobile Internet leaves much to be desired. As a result, the share of WiFi users among smartphone owners displays growth, whereas the share of mobile Internet users remains flat.

In the 3rd quarter 2013, the Big Three operators' sales revenue from mobile data services was up by 32.6 percent from the same period last year – to \$1 billion, as follows from their financial reports. MTS and VimpelCom wouldn't agree with Deloitte's findings. A spokesperson for MTS insisted that more and more owners of smartphones use Internet services amid the increasing mobile Internet speed, which renders WiFi useless. Speed of data exchange with the base station is normally high, but backbone networks often fail to cope with an increase in traffic.

A spokesperson for VimpelCom said that mobile Internet traffic, including on smartphones, doubles every year, and VimpelCom doesn't see its subscribers using smartphones to prefer WiFi: as a rule, increasing penetration of smartphones leads to a snowballing growth in mobile Internet traffic. According to operators, WiFi can contribute to the popularity of mobile data services, since a subscriber who uses WiFi will probably want to use mobile Internet as well. ❖

❖ VimpelCom to Unfold 4G

Russia's third largest mobile operator VimpelCom is planning to expand its LTE coverage in the Russian capital up to 80% until the end of the year 2013, and in 2014, the company plans to roll out 4G services in the Moscow region. According to the plan, in the 4th quarter 2014, VimpelCom will deploy LTE networks in all major towns of the Moscow region.

VimpelCom joined forces with Apple to test 4G networks on iPhone 5S and 5C, and beginning next week, the company's subscribers will be able to use LTE services on new smartphones officially imported into Russia, communicated a spokesperson for the operator. ❖

❖ Neutrality With Reservations

The State Committee for Radio Frequency (SCRF) approved the principles of technological neutrality for several spectrum bands. Operators will finally be able to build 3G networks in the 890-915 MHz and 935-960 MHz bands all over the country, while 1710-1785 MHz and 1805-1880 MHz bands will be used for 4G (LTE) services.

This decision was made at the December meeting of SCRF which also established obligations for carriers extending their license to use frequency or applying for a new one.

In the range lower than 1 GHz operators will be obliged to cover residential settlements with population over 1,000. Operators that plan to use frequencies in the 1-2.2 GHz range will have to cover residential settlements with population over 2,000 people, and finally, holders of spectrum in the 2.2-3 GHz range will cover settlements with population of 10,000 people and more. If an operator is granted a license to develop a technology which they have never used before, they are obliged to provide communication services in localities with population over 10,000.

“This is the most important and socially desirable decision in a few years. It will allow to provide advanced communication services in

localities with population as small as 1,000 residents, and 30 million of our citizens all around the country live in such places”, said Minister of Communications and Mass Media Nikolay Nikiforov. According to him, the decision to tie coverage of localities with population over 10,000 residents with the principle of technological neutrality aims to balance interests of all market players, including the so called Big Four operators who have already stated their intention to bring LTE services into small localities. Previously, license terms required coverage in towns with population more than 50,000 people.

Meanwhile, Deputy Head of Federal Antimonopoly Service (FAS) Anatoly Golomolzin argued against the additional obligations on operators claiming that they will hinder competition. According to Golomolzin, technological neutrality with additional burdens won't fuel active expansion of LTE services, since it won't increase competitive pressure from regional operators on the Big Four operators who were granted LTE licenses in other bands, but don't seem too eager to roll out networks.

In a meeting with the media Nikolay Nikiforov communicated that the Ministry is open to consider the arguments brought up by the FAS. ❖

❖ Ministry of Communications and Mass Media Has Faith in LTE

Over the next five years the number of Russians having access to 4G networks will be up by 30-40 million people, Russian Minister of Communications and Mass Media Nikolay Nikiforov said in December. According to the Minister, mobile broadband market will be fueled by a drastic fall in prices for LTE devices – down to \$150.

Also, Nikolay Nikiforov said that the number of LTE base stations will double in 2014-2015, and in the next five years LTE networks will become

available in most Russian localities with population over 1,000-2,000 people. Nikiforov recalled that 270 base stations were launched in 2011, about 4,000 – in 2012, and some 10,000 will be deployed in 2013.

“According to our plan, another 15,000 such stations and possibly even more will be deployed in 2014-2015”, said the Minister. ❖

❖ Subscribers Will Control Quality of Communications

Subscribers of Russia's largest mobile operator – MTS - will be able to improve reception quality in the areas covered by wired broadband Internet services.

A spokesperson for the company revealed that in December MTS' mobile phone shops will start selling femtocells – low-power consumer base stations. The operator has been offering femtocells to its corporate customers for a few years already, but it wasn't until summer 2013 when the State Commission for Radio Frequency (SCRF) ruled femtocells to be user equipment, that it became possible to offer this product to individual subscribers.

The matter of femtocells – low-power transmitters working in the frequency ranges used for 2G (GSM-900 and GSM-1800), 3G (UMTS-2100) and 4G (LTE-800, LTE-2300 and LTE-2600) services, was

discussed at the recent meeting of SCRF in mid-December. Until recently, femtocells were considered operator equipment, which complicated their use, since operators couldn't sell them to subscribers, and the latter couldn't use these devices on their own. So femtocells were supplied to corporate customers only. In June 2013, the Ministry of Communications and Mass Media lifted the restrictions through a decree which equated femtocells with user equipment. The authority authorized using femtocells with certain power constraints, specified a source in the Ministry. In turn, SCRF set forth terms of femtocells' use in order to ensure electromagnetic compatibility with other radioelectronic facilities. Femtocells may not be used to improve reception in the territories for which the operator doesn't hold a license. ❖

❖ Osnova Turned LTE On

Osnova Telecom deployed the first LTE base station. Located in Nizhni Novgorod, the launch is part of non-profit initiative "University Network".

Osnova's first LTE base station is located at the premises of Nizhni Novgorod State Technical University n.a. R.E.Alexeev. According to Osnova Telecom CEO Mikhail Petrov, at this point his company holds frequency assignment in Nizhni Novgorod for this base station alone.

It is part of the first package of frequency assignments which Osnova Telecom won in court from Roskomnadzor (Federal Service for Supervision of Communications, Information Technology and Mass Media). Mikhail Petrov told ComNews that the authority granted his company frequency for about 70 base stations in 59 regions of Russia). ❖

❖ No Money For Conversion of LTE Spectrum

According to the national operator Rostelecom, conversion of LTE spectrum in the 791-862 MHz band will require up to \$1.8 billion of investment. This far, the government has no plans of co-financing to clear the spectrum: there are no provisions for such expenditures in the budget for the next three years. In case of delays in conversion, operators won't be able to deploy LTE networks by 2019, which may entail revocation of licenses, warns Ernst & Young (EY).

Management of Rostelecom estimated expenditure on spectrum clearing in 2014-2021 at \$0.6-1.8 billion, says a report of Rostelecom's mobile asset evaluation, prepared by EY. Therefore, each of the four operators – holders of LTE licenses is estimated to spend \$0.15-0.45 billion.

In summer 2012, MTS, MegaFon, VimpelCom and Rostelecom were awarded frequency to develop LTE technology in the 791-862 MHz and 2.5-2.7 GHz bands through a contest. License requirements demand roll out of LTE coverage in towns with population over 50,000 people. Also, operators committed to invest at least \$0.45 billion every year from 2012 to 2019, or at least \$12.7 billion in total for the Big Four operators (excluding frequency conversion costs). Construction of LTE networks is aggravated by the fact that the 791-862 MHz and 2.5-2.7

GHz bands are currently occupied: the lower range is used by the military and aviation, and the upper – by MMDS and Wimax operators. In order to clear spectrum, operators established the LTE Union, which has already cleared frequencies in the high band by buying them from a number of companies. Currently the LTE Union is studying the possibility of co-sharing frequency by LTE and military and special designation radioelectronic facilities on terms of electromagnetic compatibility.

However, infrastructure reconfiguration cannot replace conversion, says the EY report. The lower band needs to be cleared by switching military communications to other frequencies. But design, acquisition and introduction of new equipment is carried out through the Federal Service for Defence Order and financed from the federal budget. But the budget for the year 2014 and target period of 2015-2016 doesn't envisage financing of spectrum conversion in the 791-862 MHz and 2.5-2.7 GHz bands. Conversion may be held off till 2017-2018, which means that construction of LTE network will suffer delays, says the analyst, pointing to the risk of license revocation in case of failure to comply with its requirements. ❖

About Us

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