

Russian Satellite
Communications Company

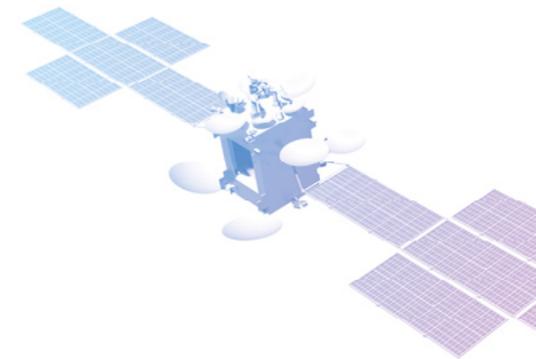
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Russian Satellite
Communications Company



The World is United
via Satellite Communications



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❖ RSCC to pay EADS Astrium

The European manufacturer EADS Astrium has won the RSCC's tender for manufacture, supply, orbit insertion, commissioning and support of Express-AMU1, which will be launched in 2015. The contract value is 6,23 billion rubles (about \$198 million).

Speaking at the press conference on the results of 2012, the head of RSCC Yuri Prokhorov said that four companies applied: the Russian ISS-Reshetnev, the French Thales Alenia Space and EADS Astrium, and the Canadian MacDonald, Dettwiler and Associates Ltd. (MDA). According to RSCC's documents, the winner offered the shortest production time – 26 months. Thales Alenia Space, which proposed the lower price – 6,029 billion rubles, offered 33 months.

As ComNews previously reported, in November 2012, RSCC signed a contract with Eutelsat. The French satellite operator leased satellite capacity at two spacecrafts – Express AMU1 (36° degrees East longitude)

and Express-AT2 (140° degrees East longitude) – for the whole duration of their lifespan (15 years). The total contract value is approximately EUR 300 million.

According to the head of Eutelsat Michel de Rosen, the spacecraft Express AMU1 will replace the position of Eutelsat 36A. Eutelsat 36A and Eutelsat 36B are the basis for satellite broadcasting in the European part of Russia, – he said. – The lifespan of Eutelsat 36A ends in 2017, when Express AMU1 will be launched into the target orbit, we plan to move 36A to a new orbital position”.

Express AMU1 is a heavy spacecraft, with 70 transponders to be installed on it. The satellite is designed for direct broadcasting, including HD and 3D. The launch of Express-AMU1 is scheduled for 2015. It will cover the European part of Russia in the Ku-and Ka-bands, as well as the territories of Africa south of the Sahara. ❖

❖ Russians online: threefold in six years

Sociologists mark the rapid growth of Internet users in Russia.

Thus, if in 2006 only 19% of citizens used the Internet, now this figure amounts to 59%, reported in the Russian Center for Public Opinion presenting the results of their regular studies on the topic. According to researchers, the proportion of daily Internet users today is 39%, whereas six years ago there were only 5%. The majority of Internet

users are young (71%) and highly educated (57%). The number of the Russians who do not use the Internet, decreased from 76% in 2006 to 38% this year. These are mainly the elderly (85%), poorly educated respondents (80%). According to the research carried out at 138 localities in 46 regions and republics of Russia, 29% of respondents have experience of online shopping. ❖

❖ RSCC and dealers

RSCC and its dealers connected about 1,000 users to the satellite Internet in the Ka-band. The company has used the capacity at the satellite Ka-Sat 9A leased from Skylogic. Order the contracts terms, each of the four dealers – HeliosNet, AltegroSky, Raduga-Internet, and StarBlazer – are to connect not less than 2,5 thousand users within two years. AltegroSky made most contracts of all dealers – about 800. This was told by RSCC's Deputy General Director for Innovation Development Eugeny Buydinov at the press conference

on the company's plans for 2013. RSCC agreed with Skylogic that there would be five subnets deployed in the leased capacity enabling the operators to work independently. "We believe that this number of dealers is sufficient – he said. – The plan of connections for each operator provides at least 2.5 thousand subscribers within two years. AltegroSky connected the major part of subscribers as the company was initially focused on the private customers market. The second place is taken by Raduga-Internet – about 120 subscribers". ❖

❖ Russia in the European top-10 HDTV

In 2012, the number of Russian households subscribed to HDTV services rose to 1,46 million from 0,31 million a year earlier, as reported in the study of the British IHS Screen Digest. As a result, Russia has taken the eighth place in the European list (in 2011 it was on the 15th place). Among the Eastern European countries, Russia is overrun only by Poland in the terms of HDTV subscribers audience. By the end of this year, IHS Screen Digest predicts that 4.08 million viewers will watch HDTV in Russia and this number will reach 7,69 million by the end of 2014. Then Russia will take first place in the Eastern Europe and

the third in Europe in general (after France and the UK), the analysts of IHS Screen Digest suggest.

In general by early 2013 there were 45,1 million HDTV subscribers in Europe, 12 million more than the year before. The leading analyst of IHS Screen Digest Andrey Katolo explains the explosive growth of the HDTV audience in Russia by the fact the largest operator of pay TV in Russia – the National Satellite Company (Tricolor TV brand) started to connect users to the HD-channels at a very reasonable price. ❖

❖ Wi-Fi via ICQ

Mail.Ru Group has launched free Wi-Fi network in Moscow – ICQ WiFi Free, consisting of 500 hot spots. The company put the network in service in early November, and in early December the network became widely available to the residents of Moscow. ICQ Wi-Fi Free hot

spots will operate in public places all over Moscow – in coffee shops, shopping centers, railway stations and airports, the press service of the company notes. The technical partner of the project is Tascom (a part of MTS). ❖

❖ Yamal-402 rescued

Yamal-402 manufactured by Thales Alenia Space for Gazprom – Space Systems (GSS), has successfully passed the orbital flight tests at the beginning of 2013 and now is under the control of the Russian specialists, the press service of Thales Alenia Space reports. Yamal-402 currently located at 54,9 ° E, was successfully tested and is ready for operation. Due to the fast response of the mission control center, Thales Alenia Space managed in real time to correct the irregular orbit, set by the booster,”- the company’s spokesman said.

On December 8, 2012, at 17.15 MSK the launch vehicle Proton with Yamal-402 on board was launched from the Baikonur Cosmodrome.

The work of the three stages of Proton was held regularly. Further, the Breeze-M booster joined the relay. The first three starts of the main engine were held regularly, but the fourth start finished four minutes earlier. Because of this Yamal-402 did not go to the intended geosynchronous transfer orbit, from where it moved under its own power at the expense of a few starts of the apogee engine to the planned orbital position of 55 ° E .The last (fourth) maneuver was successfully accomplished in the night of 14 to 15 December 2012. A source familiar with the situation told ComNews reporter that the active lifetime of the satellite has decreased from 15 to 11 years. ❖

❖ GLONASS becomes MVNO

The federal network operator and promoter of GLONASS system – the non-commercial partnership “Promoting development and use of navigation technologies” (NP “GLONASS”) has received the MVNO license.

“Obtaining the license will enable to provide the best possible service area of ERA-GLONASS system, – the report says. – As far as the scene is covered by at least one mobile operator, the information about the incident will be promptly transmitted to the response center and assistance will be rendered as quickly as possible”. In September

2012 the government order defined NP “GLONASS” as a sole executor of ERA-GLONASS project to create navigation and information system emergency response in case of accidents. It was reported that the entire budget of ERA-GLONASS is 3,9 billion rubles (about \$124 million), it is estimated that this year 1,7 billion rubles will be allocated for its implementation. The founders of the non-commercial partnership are JSC “NIS GLONASS”, Yandex, MegaFon, RTComm.ru (the “daughter” of Rostelecom), Summa Telecom and Association GLONASS/GNSS – Forum. ❖

❖ Four ICT missions by Prime Minister

The Russian Prime Minister Dmitry Medvedev gave for orders to the Russian Ministry of Communications aimed at development of information technology and telecommunications, the Ministry reports. The orders were given on the results of the meeting of the Presidium of the Presidential Council for economic modernization and innovative development, held at the end of December 2012. In the first half of 2013 the responsible ministries are to determine how to address

the development of broadband access in the country, the establishment of research centers in the field of IT, providing legal protection to development of the Russian innovative companies as well as tax benefits for IT-companies. “The Russian Federation has a serious problem with BBA development. We see that we are, in general, well behind of many of our colleagues in Europe” – the Minister of Communications Nikolay Nikiforov said at the meeting. ❖

❖ Russian Railways expand Wi-Fi fourfold at the railway stations

On 2013 the management of the railway stations of the Russian Railways plan to almost quadruple the number of the stations in Russia with Wi-Fi Internet access, the press service of the Russian Railways reports. Now this service is available at 41 stations. “In 2013, their number will be increased to 160,” – the statement says. Now over 5,000 people use Wi-Fi at the railway stations. According to the report,

the project is implemented in cooperation with Vokzal-Infocom, a joint venture of the Russian Railways and Integration of communications. In addition, in 2013 the Russian Railways will almost triple the number of cells in automated storage chambers, operating with contactless smart cards. In 2012, the number increased from 849 to 2 thousand items, by the end of 2013 the number will increase to 7,639. ❖

❖ Vimpelcom launches LTE in Moscow

Roskomnadzor issued VimpelCom a permission to use Moscow LTE network, the company reports. The acceptance certificate on telecommunications facilities is signed, the representative of the supervisory authority confirms. At the moment the telecommunications network has about 100 base stations from Ericsson and Huawei within the Third Ring Road. The company plans to cover the whole territory of Moscow in the second half of 2013 – then,

perhaps, VimpelCom will connect the first LTE subscribers. The operator’s network uses the frequency band of 2500-2690 MHz, the right to use the band across the country was won in July 2012 together with MTS, MegaFon and Rostelecom. These frequencies were received in addition to the main band, which was exhibited for auction – 791-862 MHz. But this range is yet to be cleared from the current users (mainly military). ❖

❖ Russian IP revolution

The Ministry of Communications has set new rules for building networks: now operators can share nodes and lines of communication, including radio access, with no confirmation of the physical or software sharing of network elements. The Minister Nikolai Nikiforov signed the order on December 6, 2012, but it was released in late January 2013. The new rules will enable the operators to accelerate the development of LTE and legitimize IP-telephony. In addition to brand new opportunities for operators interaction the document implies the possibility of building a geographically distributed nodes of communication, these are networks with switching units, whose communications are geographically distant

from each other, including those located in different municipalities or different entities of the Russian Federation. The order legalizes the geographically distributed communications centers in Russia . It also permits to construct the combined switching nodes, whose communications equipment combines the functions of the switching systems of different networks of fixed and mobile telephony. The order also established a long-awaited opportunity to organize IP-communication lines between the user equipment and the assembly of local telephone service. The procedures associated with electric supply of the networks are greatly simplified. ❖

❖ DirecTV 1R takes in guests

In January 2013 satellite operators Tricolor TV and NTV-Plus started broadcasting via satellite DirecTV 1R (56 ° E). The spacecraft operates in the same point as the satellite Bonum-1, which lifespan ends in 2013. Parallel broadcasting from two satellites will continue during one month. The operation of DirecTV 1R should be completed after the launch and commissioning of the new RSCC's satellite "Express-AT1".

The RSCC's press service reported about the transition to a new satellite; RSCC leased satellite capacity on DirecTV 1R owned by Intelsat. Cluster placement of Bonum-1 and DirecTV 1R is caused by the need to provide redundancy good reception signal in case of emergency situations when broadcasting digital television packages of Tricolor TV and NTV-Plus in the Urals and Siberia. ❖

❖ MGTS connects 3 thousand Wi-Fi hot spots in schools

"Moscow City Telephone Network" (MGTS), a part of MTS, won the competition of Information Technology Department of Moscow on deployment of Wi-Fi networks in Moscow schools. Wi-Fi networks will be deployed by the end of February 2013. The government contract

on deployment and maintenance was concluded in January for two-years period. All hot spots will provide broadband access. MGTS provides content filtering by limiting access to sites with illegal and "adult" content. ❖

❖ BBA must go down

The Prime Minister Dmitry Medvedev instructed the Ministry of Communications, the Ministry of Finance and the Ministry of Economic Development to develop measures to reduce the prices for broadband access (BBA) by April 1, 2013. The market participants believe that the high prices for the service are determined by the lack of developed backbones system in Russia and the high cost of its creation.

The press service of the government of the Russian Federation announced the order of Dmitry Medvedev. As indicated in the report, the ministries must “present a package of measures, including legal,

organizational and financial issues, providing a significant reduction in the cost of household connection to the Internet with the use of innovative broadband technologies with increased bandwidth”.

“Now, the Ministry of Communications is considering the opportunity to reduce several times the cost of building broadband infrastructure through introduction of innovative solutions, – the representative of the Ministry commented. – We plan to present our proposal in April 2013. This is not about regulating the tariffs of operators and subsidizing the companies – the issue is in the field of innovations”.

❖ Mobile Internet sets records in Russia

The number of mobile Internet subscribers with access via smartphones grew in Russia by 88% to 22.5 million in 2012, according to the study of J’son & Partners Consulting (J&P). The number of tablet owners using mobile access increased by 8,3 times to 2,5 million people. The average monthly traffic per mobile Internet subscriber using a smartphone, is up 303 MB, using the tablet – 450 MB. At that mobile Internet users with smartphones and tablets make up a smaller part compared to the number of subscribers connecting to the Internet via ordinary mobile phones – 40,5 million users. The average monthly traffic in this group was less than 50 MB.

As J&P forecast, the tablet sales in Russia will grow by 2.3 times in the next three years and in 2015 will amount to 5,8 million units, sales of smartphones will increase by 1,7 times to 22,2 million by 2015, The Cash park smartphones will increase by 2,3 times to reach 63 million units. The effective park of tablets will reach 12 million units.

According to J&P, the penetration of mobile Internet access in Russia at the end of 2012 was 55% (40 million subscribers), which is 2,4 times higher than the world average (2,9 times higher than in Indonesia, 3,4 times higher than China, 9,1 times higher than in India). At the same time Russia is second among developed countries: the penetration of mobile Internet access in Japan – 85%, USA – 81%, Germany – 65%.

❖ **Wi-Fi and femtocells defeat traffic**

The volume of mobile data traffic in Russia from 2011 to 2016 will grow by next larger (to 3160 Pb). Analyzing the international experience, the researchers of J'son & Partners came to the conclusion that additional capacities, such as Wi-Fi and femtocells, are needed to unload 2G/3G

core networks. However, administrative action in Russia – the duty for frequencies use for Wi-Fi – puts breaks on development of public Wi-Fi networks. Limitations for femtocells use are to be overcome at the next meeting of the State Commission for Radio Frequencies (SCRF). ❖

❖ **Internet on boards of Aeroflot and Transaero**

By the end of 2013 Aeroflot will provide Wi-Fi on board of 26 long-haul aircrafts. “In Q1 2013 it is already planned to launch the service on board of 15 of these aircrafts: 12 Airbus 330 aircrafts and three Boeing 777 aircrafts, – Aeroflot announces. – Aircrafts Airbus 330 now form the basis of the company’s long-haul fleet. Wi-Fi Internet activation on “three sevens” will continue in the following years: six Boeings in 2014 and for the three aircrafts in 2015 and 2016. “To organize communications on board Aeroflot has chosen the solution of OnAir –

a global provider of communications services for the aviation, which uses the satellite constellation and equipment of Inmarsat. The company was established in 2005 by the IT-service provider to the aviation industry SITA and Airbus.

Another major Russian air carrier Transaero launched high-speed broadband access to the Internet and mobile communications on board in August 2012 on four aircrafts and plans to develop the program in 2013. ❖

❖ **RuSat finds a lodgement at Yamal-300K**

The satellite operator RuSat signed a contract with JSC “Gazprom Space Systems” (GSS) on the lease on the new satellite Yamal-300K, belonging to GSS, and Ku-band transponders, with a bandwidth of 72 MHz. The resource is leased to enhance cooperation

of RuSat and Panasonic Avionics Corporation (Panasonic, USA) for provision of telecommunication services to air travelers. The term of the contract is five years, the volume of the contract is not disclosed. ❖

Frequency plan smashed

From January 1, 2012, when the new method of spectrum payment came into force, Roskomnadzor collected over 16 billion rubles (\$ 0,5 billion) from the operators – 1 billion rubles more than expected. The major part – 67% – was paid by the Russia's Big Three, at that more than 23 thousand permits for radio frequencies were terminated.

This was told by Oleg Ivanov, deputy head of Roskomnadzor, at the end of December 2012. Originally it was planned to collect 15 billion rubles. “We did not expect to collect all the estimated funds, as since November 2012 when the changes were accepted the operators started optimization of their networks” – Oleg Ivanov commented. 

GSM-1800 to be put up to auction

The auction for GSM-frequencies in the 1800 MHz will be carried out in the form of cash auctions, rather than the traditional competitions. The proposal of the Minister of Communications Nikolay Nikiforov was upheld in late 2012 by the members of the State Commission for Radio Frequencies (SCRF). The acting government resolution from 12.01.2006 № 8 does not allow to conduct auctions for the right to provide communication services using radio spectrum, since they can be carried out only if the spectrum is not distributed or used by any radioelectronic

equipment. However, the members of SCRF bypassed this restriction: they agreed that it was necessary to suspend the clause 3 of SCRF's decree from 02.10.2012 № 12-15-03, ordering Roskomnadzor to conduct auctions in nine regions in the form of competitions. “Following the government decree on the new auction terms, the clause 3 of the SCRF's decree will resume, then Roskomnadzor will be able to hold an auction for the first time”, – the press service of the Ministry of Communications says. 

LTE at discount

Operators will pay less for the use of frequencies for “advanced technologies” – LTE, HSPA (3G) and Wi-Fi. For LTE frequencies the fee reduction can be tenfold. This was told by the deputy head of the Federal Service for Supervision of Communications, Information Technology and Communications (Roskomnadzor) Oleg Ivanov at the end of December 2012. According to him, the changes in the method of payment calculation for spectrum use in the relevant

legislation are prepared in order to reduce the operators' fees for frequencies for LTE and HSPA. According to the Deputy Director General of FSUE “RFC CFA” Dmitriy Mitrofanov, it is planned to introduce a reduction factor of 0,1 for LTE frequencies, whereas now this ratio is 0,5. The main change will be the transition to a scheme of charging for bandwidth allocation. Earlier the operators were charged for each individual frequency assignment. 

❖ LTE grows faster

In Russia, the mobile Internet is growing faster than the fixed broadband: LTE traffic increases by 1.5 times each month. However, the LTE operators do not compete with fixed broadband, as their tariff levels are much higher. This was learnt by ComNews reporter from

the BBA market players. They all agree that despite the fact that LTE technology is still at the stage of implementation, its real advantage over fixed broadband access as an ability to provide coverage in locations where wired internet is not available. ❖

❖ Total Wi-Fi in Moscow underground

Wireless Internet is to cover fully Moscow Metro by September 2014. Moscow Metro announced an open auction in the electronic form on the right to enter into an investment agreement “Wi-Fi in the Moscow Metro”. As the Moscow government reports, under the terms of the technical project deployment of wireless Internet access networks are to start in 2013 and should be fully completed by September 2014. The contractor is to provide wireless access to the Internet in the cars and at all operating lines in the regime of an open network continuously for the whole route of the rolling stock within each underground line. Wi-Fi network should provide access to

full-duplex mode at a speed of at least 128 kbit/s per one networking session within the car. The number of concurrent sessions should be at least 24 per each car.

However, at the moment Moscow Metro is not able to negotiate with the operators on the terms of building network, including free Wi-Fi, in the capital’s underground. According to the report of the Department of Information Technology of Moscow the tender applications period is extended till the end of January.

Wireless Internet is now available so far only on the Circle Line of Moscow Metro. ❖

❖ Tele2 AB gives voice

Swedish Tele2 AB tested technology Voice over LTE (VoLTE) for GSM-frequencies, demonstrating the possibility of voice transfer in 4G networks. Tele2 Russia hopes that the Russian regulator approves technological neutrality.

According to Tele2 AB, the Scandinavian operator plans to start operation of technology over the next year. Designed by Mavenir

Systems and Nokia Siemens Networks the technology has been tested in a live network of the operator in the range of GSM-1800.

“The measurements on the whole cycle from one subscriber to the other have shown increased voice quality and reduced connection time, – the operator said. – We can declare the end of testing VoLTE technology in Europe”. ❖

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Key topics of the Conference:

- “Development of broadcasting in the Russian Federation 2009–2015” Federal program: implementation progress.
- What changes should be expected in the relations between broadcasters, operators and telcos with the transition to digital broadcasting?
- Regulation prospects in developing media sector
- IPTV, OTT and other ways of video delivery in the digital environment
- New broadband and CDN technologies in the service of video content delivery services
- OTT content monetization strategies
- Internet broadcasting strategies: successful realization examples
- Effective strategies of digital satellite TV broadcasting services delivery in Russia’s pay TV market
- Equipment for broadcasters and multi-service networks
- Effective content security solutions for multichannel pay television

Speakers:



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Mark Krivosheev,
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Konstantin Chumachenko,
CEO, NGENIX

Organizer:



Co-organizer:



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About Us

ComNews is the major Russian publisher of business periodicals in the ICT industry and the main worldwide supplier of unbiased accurate information about the Russian ICT business.

ComNews has launched numerous projects in order to deliver unbiased, up-to-date and complete information about the Russian ICT industry across the former USSR countries and worldwide.

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15 years in the market, offices in Moscow and St. Petersburg

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