White paper

ICO TELE2-Teleport

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Preamble

Cellular operators are obviously having a shortage of backbone resources, as they have cancelled the tariffs with unlimited Internet traffic. As a rule they claim that these tariffs are not in demand, but they do not mention the inflated prices (from 1200 to 2500 rubles a month) for the unlimited traffic service. Any poll of cellular subscribers will show that a subscriber will switch to an unlimited tariff if its price is 200-250 rubles (as it was at the start of the company Yota). The success of Yota is fully based on unlimited Internet at a reasonable price!

Mission

- to improve the quality of service and reduce the price for regional Internet providers, and hence for end users.
- to establish REGION-IX for the inclusion of Moscow operators in the all-Russia market and ensuring the quality of feedback in the regions of Russia.
- to create co-brands together with mobile operators, offering unlimited Internet tariffs at reasonable prices, and to provide them with high-capacity lines.

Objectives

- to become the largest Internet provider in the regions of Russia.
- to become the largest Russian Internet provider connecting Europe and China.

Project Summary

Planned turnover:

- "Minimum" option: 200 million rubles. (The "Moscow-Krasnodar" direction with the capacity of 800Gbit/s - 1600Gbit/s).
- "Medium" option: 820 million rubles. (The Moscow-Yekaterinburg-Novosibirsk direction with the capacity of 500 Gbit/s).
- "Maximum" option: 2.16 billion rubles. (The Stockholm-Moscow-Yekaterinburg-Novosibirsk-Krasnoyarsk-Irkutsk-Blagoveshchensk direction with the capacity of 2000 Gbit/s).
- "Mega" option: 3 billion rubles. (The Stockholm-Moscow-Yekaterinburg-Novosibirsk-Krasnoyarsk-Irkutsk-Blagoveshchensk direction with the capacity of 4,000 Gbit / s).

Return on Investment:

- to reach the break-even point within 12-16 months from the beginning of financing.

The timing of the launch:

- "Minimum" option - 3 months.
- "Medium" option - 6 months.
- "Maximum" option - 11 months.
- Option "Mega" - 24 months

Equipment planned for acquisition:

- Israel.
- the USA.

Legislative norms of fundamental importance:

The Order of the Ministry of Communications and Mass Media of the Russian Federation of August 26, 2014 No. 258 (http://68.rkn.gov.ru/directions/p18724/).

Own means:

- 30-200 million rubles. At the end of 2017.

Risks:

- Satellite Internet, 5G technology: optical fibre connections are faster.
- Decentralization of data centres in Moscow:

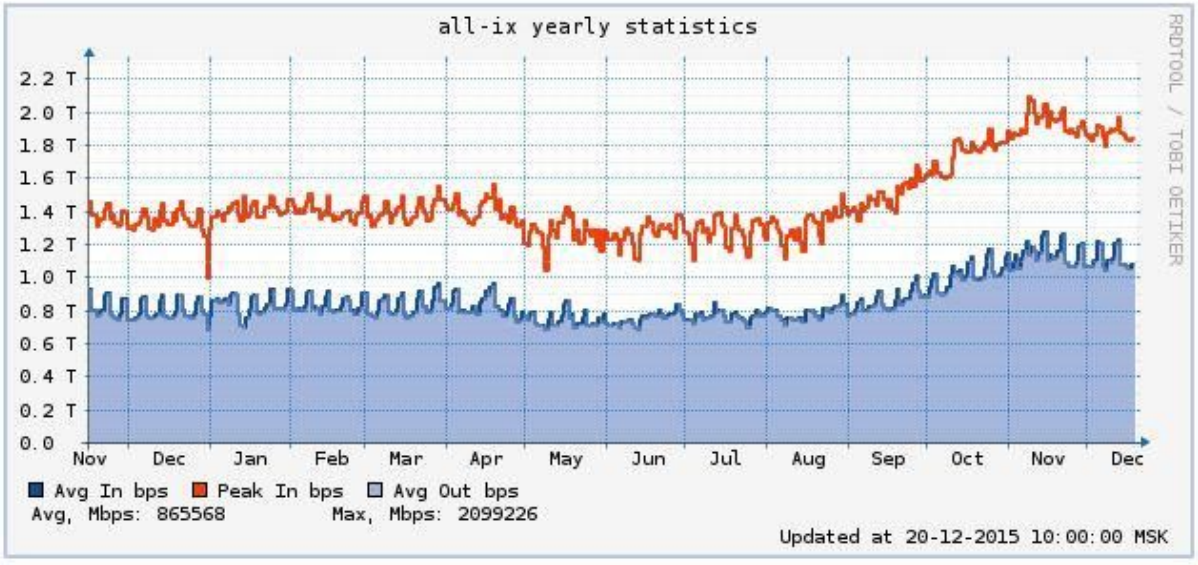
Data centres in the regions already exist, but no one is going there, because the main corporate consumer is in Moscow (the management of all large companies, both corporations and media, is in Moscow, and wants to have the server side by side). And the expensive infrastructure of data centres for tens of thousands of racks has already been established in Moscow, and is actively developing.

Funding objectives

• Option "Minimum": 170-300 million rubles of Investment for the direction "Moscow-Krasnodar" (2/3 of the budget for fibre + 1/3 leased equipment / we are ready to give 40-45% of the share of SPV for this).
• Option "Medium": 800/1000 million rubles of investment (east, south, backbone inside - Russian traffic / the proportion of costs and the share of the investor are the same).
• Option "Maximum": 2/3 billion rubles investment (east, south, backbone international traffic (from Stockholm to China) / 1/3 fibre + 2/3 leased equipment / the share of the investor 45-55%).
• Option "Mega": 4/6 billion rubles of investment (all the same, with only two parallel routes / increase the capacity by 2-4 / - 1/3 of the budget for fibre + 2/3 leased equipment / the share of the investor 55-65%).

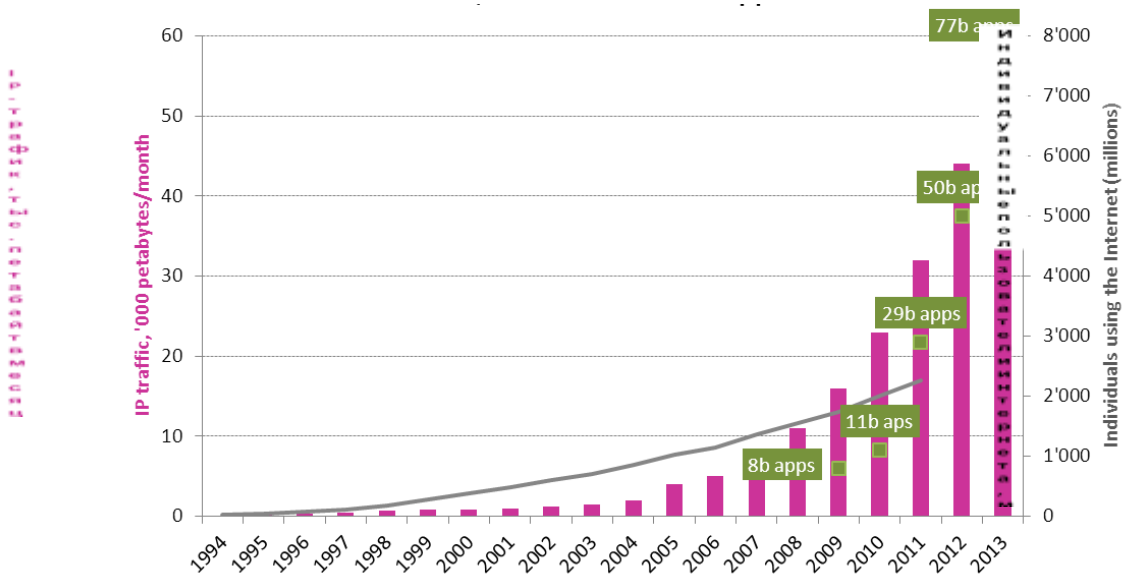
The market situation

Introductory part



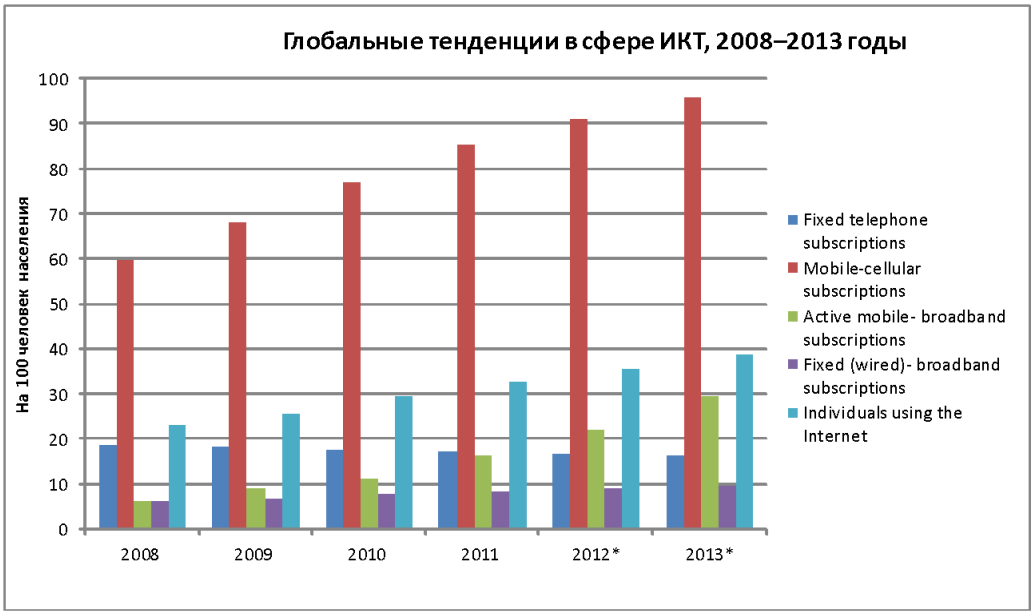
In 2015, despite the crisis (or perhaps more because of the economic crisis), there was an explosive growth of traffic on the main Internet site of the country MSK-IX, traffic usually grew 2 times every 1.5 years, now we are experiencing a two-fold increase in a year.

Figure 1.1 - The growth of IP traffic, the number of Internet users and application downloads (1994-2013)

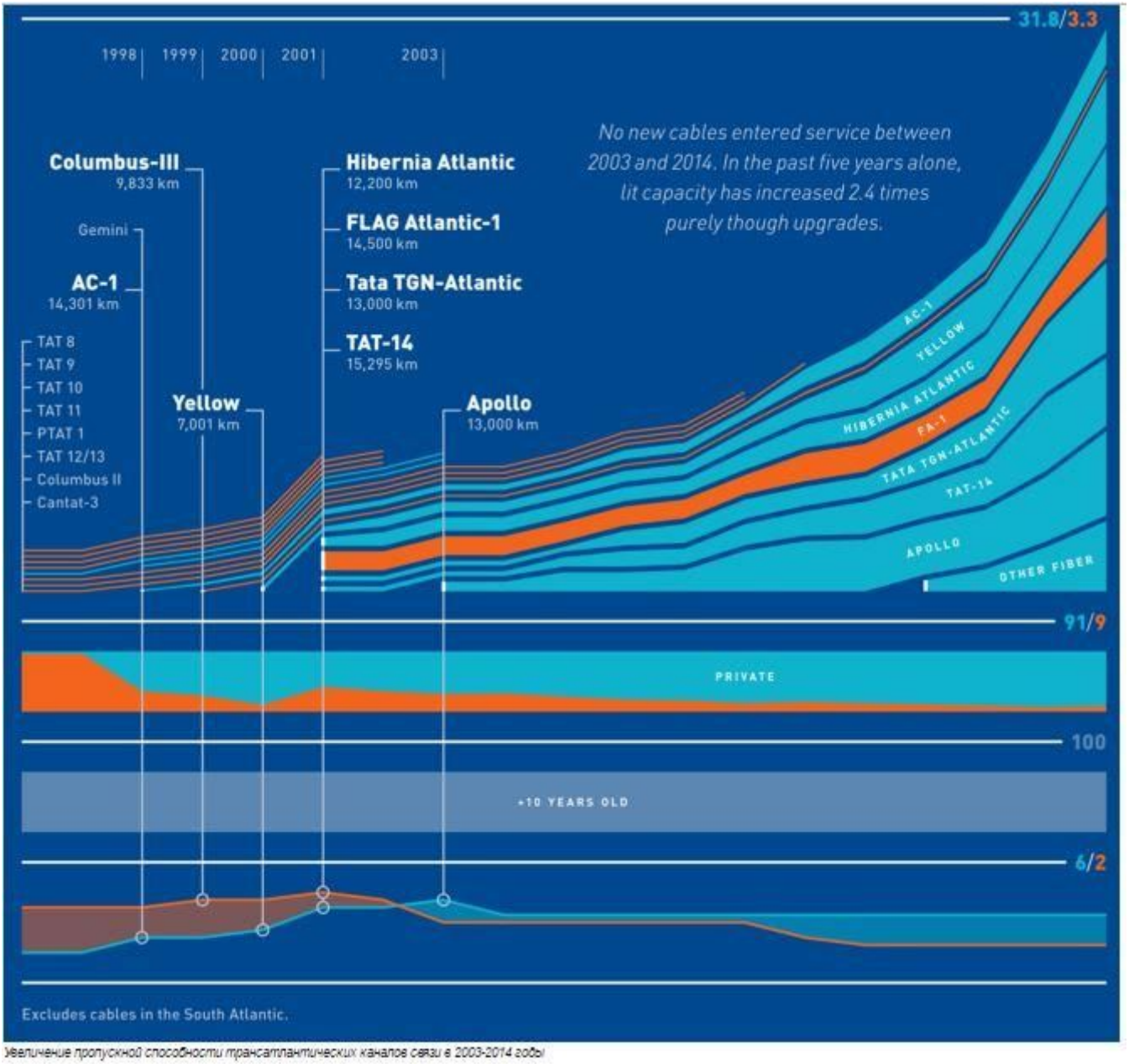


Source: ITU, based on ITU data, Cisco VNI, Andrew Odlyzko, RHK, Telegeography, IDC, ABI Research, and Chetan Sharma Consulting.

Notes. - 1. "b" is equal to a billion. 2. The figures for IP traffic and application downloads for 2010 and later, as well as the number of individual Internet users for 2013 are estimated data.



*Note. - * Data for 2012 and 2013 are based on estimates. Source: ITU World Telecommunication / ICT Indicators Database.*



Увеличение пропускной способности трансатлантических каналов связи в 2003-2014 годы

The growth of mobile Internet traffic in 3G, 4G and Wi-Fi networks.

All Internet traffic is becoming mobile nowadays. As a rule it is divided among cellular operator in the segments of 3G and 4G networks, federal and local regional operators which set up Wi-Fi access points within residential and non-residential space. New Wi-Fi protocols, such as Wi-Fi/n/ac, have already overstepped the limit of 100 Mbit/s and are able to provide the speed up to 1 Gbit/s inside the buildings. Although one should not overestimate the importance of Wi-Fi Internet compared to 3G and 4G networks, as they are normally used (with optical fibre connection) to do the tasks which include "heavy" web traffic transmissions. "Heavy" web traffic traditionally includes multimedia files at home as well as archived professional documents and data in the workplace.

For the moment none of the operators fulfills the conditions mentioned in their advertising slogans. All of them claim to provide the connection speed of 100 Mbit/s but basically cannot offer more than 30 Mbit/s. Talking about large companies, such as Rostelecom, Vympelcom, we should mention that the Internet speed they provide is even slower, 10 Mbit/s.

Growth prognosis.

Growth prognosis is set out in two publications describing global and regional trends.

According to the data given in «Cisco® Visual Networking Index™ Global Mobile Data traffic Forecast for 2013 to 2018» mobile data traffic volume will increase eleven-fold in the next four years and might amount to 190 Exabytes in 2018. The projected growth of mobile data traffic will also be caused by the continuously increasing number of Internet-connected personal devices and M2M connections which will exceed 10 billion in 2018. This is 1,4 times bigger that the total world population which will be approximately 7,6 billion people, according to the United Nations estimates.

The projected above potential traffic volume (190 Exabytes) in 2018 is equivalent to:

• the amount of both fixed and mobile data IP-traffic in the year 2000 multiplied by a factor of 190 ;

• 42 trillion of images (MMS messages, Instagram, etc.) - 15 messages a day per capita for a year;

• 4 trillion of videos (YouTube and others) - more than 1 video clip a day per capita for a year.

Between 2017 and 2018 mobile Internet traffic will be increasing by 5.1 Exabytes every month. This will be triple the projected total mobile Internet traffic in 2013 (1,5 Exabytes a month)

The main factors affecting the growth of global mobile data traffic

Cisco predicts that the growth rate of the global mobile data traffic will be triple the growth rate of the global fixed Internet traffic between 2013 and 2018. The abovementioned increase is determined by the following trends:

• The increase in the number of mobile users from 4.1 billion in 2013 to 4.9 billion in 2018.

• The increasing number of mobile connections. The amount of mobile devices and their connections is expected to reach 10 billion (8 billion of personal mobile devices and 2 billion of M2M connections) in 2018; in 2013 the overall number of mobile devices and M2M connections equaled to 7 billion.

• Faster mobile data speeds. In 2018 the data transmission speed in global mobile networks will almost double, from 1.4 Mbit/s in 2013 to 2.5 Mbit/s in 2018.

• Increasing amount of mobile video files. In 2018 mobile video files will make up 69 percent of the global mobile data traffic, whereas in 2013 the rate was 53 percent.

Global move to Smart devices

• In 2018 54 percent of mobile connections will be classified as smart, in 2013 the rate was only 21 percent. Smart devices and connections are characterized by developed calculation and multimedia functions and a minimum level of 3G communications.

• Smartphones, tablets and laptops will be forming 94 percent of total mobile data traffic in 2018. M2M traffic will make up 5 percent of the global mobile data traffic, non-smartphones will take 1 percent and the share of other wearable devices will be 0.1 percent of the global mobile traffic.

• Mobile cloud traffic will increase 12-fold in the period 2013-2018 at a CAGR of 64 percent.

The impact of M2M connections and wearable devices

Talking about M2M connections we mean applications, which allow the communication between wired/wireless devices to provide navigation systems functioning (GPS), resource tracking, communal metering, video surveillance and security. A new segment of wearable devices, such as smart watch and glasses, physiological sensors, wearable measuring devices which are able to connect to networks via smartphones, Wi-Fi hotspots and Bluetooth, has also been added to this category for projecting the growth rate of IoE (Internet for Everything)

• In 2013 M2M connections represented 5 percent of all mobile devices and more than 1 percent of total mobile data traffic.

• In 2018 M2M connections will account for almost 20 percent of all mobile devices and generate approximately 6 percent of total mobile data traffic.

• In 2013 there were 21.7 million wearable devices. In 2018 the amount will grow up to 176.9 million at a compound annual growth rate (CAGR) of 52 percent.

Increase in mobile network connections speed

The average speed is expected to almost double between 2013 and 2018. The speed of mobile data connections is the key factor to the support and growth of mobile traffic volume.

	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**CAGR**
Average connection speed of a mobile device (kb/s)	1 387	1 676	1 908	2 147	2 396	2 509	13 %
Average connection speed of a smartphone (kb/s)	3 983	4 864	5 504	6 132	6 756	7 044	12 %

Source: the results of Cisco Global Internet Speed Test (GIST), held as a part of the Cisco VNI program and other independent evaluations of network speeds. Cisco GIST application is used by over a million of people worldwide. The abovementioned numbers refer to mobile data connection speed only and do not include Wi-Fi networks speed. The forecasts are based on extrapolation of historical data about mobile network connection speed.

4G standard and traffic growth.

Many communications operators are introducing 4G standards technology to meet the growing demand for wireless service. New mobile communications infrastructures, based on 4G standards, are created in emerging markets, while in developed countries 4G technologies either replace or complement the inherited 2G and 3G solutions.

• 4G networks will represent 15 percent of total connections in 2018, whereas the share was 2.9 percent in 2013.

• In 2018 4G connections will generate 51 percent of total mobile data traffic, that is 8 Exabytes monthly. In 2013 the share was 30 percent, 448 Petabytes monthly.

• Between 2013 and 2018 4G mobile data traffic will increase 18-fold. (78 percent CAGR).

More traffic was offloaded from cellular networks (on to Wi-Fi) than remained on cellular networks

Offload pertains to traffic from dual-mode devices (i.e., supports cellular and Wi-Fi connectivity, excluding laptops) over Wi-Fi and small-cell networks. Offloading occurs at the user or device level when one switches from a cellular connection to Wi-Fi or small-cell access. Cisco VNI Global Mobile Data Traffic Forecast (2013-2018) projections include traffic from both public hotspots and residential Wi-Fi networks.

• In 2018 more traffic will be offloaded from cellular networks on to Wi-Fi (17.3 Exabytes per month) than remained on cellular networks (15.9 Exabytes per month)

• By 2018, 52 percent of all traffic from mobile-connected devices will be offloaded to the fixed network by means of Wi-Fi devices and femtocells (compared to 45 percent in 2013)

Global analysis of mobile applications: video keeps the highest position

Between 2013 and 2018 mobile video traffic will increase 14-fold with a maximum CAGR among all mobile applications.

- Mobile video traffic will account for 69 percent of total mobile data traffic in 2018 (with 53 percent in 2013)
- The share of web and other networking applications will decrease to 17 percent of total mobile data traffic (with 28 percent in 2013)
- The share of audio streaming will fall from 14 percent in 2013 to 11 percent in 2018.
- File sharing mobile data traffic will account for 3 percent in 2018 (with 4 percent in 2013)

Global Mobile Data Traffic Forecast by Region

According to the forecast, the Middle East and Africa will have the strongest mobile data traffic growth of any region. The ranking of regions according to the projected growth rate by 2018 is provided below:

1. Middle East and Africa will experience the highest CAGR of 70 percent, increasing 14-fold;
2. Central and Eastern Europe will have the CAGR of 68 percent, increasing 13-fold;
3. Asia Pacific will have the third-highest CAGR of 67 percent, increasing 13-fold;
4. Latin America will have the CAGR of 66 percent, increasing 13-fold;
5. North America will have the CAGR of 50 percent, increasing 8-fold.
6. West Europe will have the CAGR of 50 percent, increasing 7-fold;

Asia Pacific will lead all regions in mobile data traffic volume. The projected mobile data traffic volume ranking of regions in 2018 is provided below:

1. Asia Pacific with 6.72 Exabytes per month;
2. North America with 2.95 Exabytes per month;
3. West Europe with 1.9 Exabytes per month;
4. Central and East Europe with 1.64 Exabytes per month;
5. Middle East and Africa with 1.49 Exabytes per month;
6. Latin America with 1.16 Exabytes per month.

Methodology of the research

The Cisco VNI Global Mobile Data Traffic Forecast (2013-2018)was based on a combination of analyst projections, in-house estimates and forecasts, and direct data collection. Upon this foundation are layered Cisco's own estimates for application adoption, minutes of use, and kilobytes per minute. The adoption, usage, and bit-rate assumptions are tied to fundamental enablers such as broadband speed and computing speed. A more detailed description of the methodology is included in the given report.
(http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.html).

«Global mobile data will continue its impressive growth and will increase almost 11-fold in the next 5 years; in 2018 it will surpass 57-fold over that just a few years before, in 2010, - Doug Webster, Cisco' Vice President for Global Marketing and Corporate Communication, points out. - Such growth shows that mobility has become the most important characteristic of any interaction with the web and both individual users and companies attach great importance to it. Such bright dynamics also shows that service providers located at ground zero for the IoE, are given immense opportunities.».

Corporate clients got carried away with additional services.

Omsk branches of mobile service providers claim a slight increase of corporate clients share. Not the least, the success of this business direction could be explained by a significant growth of mobile Internet usage.

The federal press notes that this year mobile service providers have experienced a substantial growth in the number of corporate subscribers. As "Vedomosti" report, this segment has grown by 10-20 percent, while the growth of the total subscribers base accounts to 4 percent for the period. The newspaper reports that providers' proceeds from corporate clients exceed the average rate by 40 percent. Business clients consume a greater number of expensive services, such as international roaming and mobile Internet.

Diagnostics Company has conducted a survey among communications providers and found out that Omsk market was slightly different from the federal one. Nevertheless all the market players note an increasing interest of business clients in data delivery and additional services.

Targeting small business.

Maksim Solovyev, commercial director of «Tele2 Omsk» claims that Omsk market in general follows the all-Russia trend.

«Tele2 Omsk is experiencing a more dynamic growth of corporate clients segment compared to the individual subscribers segment. This involves both the proceeds and net increase in the subscribers database. In the first half of 2014 in the context of oversaturated mobile communications market Tele2 corporate clients database increased by 7 percent in Omsk. The stable growth of the company proceeds in business segment is grounded in the constantly growing level of consumption of all kinds of traffic - voice and data. Existing practice shows that corporate clients talk more and use discount services more frequently».

According to the press service of the mobile provider, voice traffic continues to prevail in the mobile communications market for business, however the use of Internet services has also started to grow.

The two trends influencing the market have been noted recently. The first one is that popularity of prepaid tariff plans has grown rapidly. The second trend refers to the increasing sales in the segment of Machine-to-Machine. M2M tariffs are in a great demand among business people, who work in the cargo-passenger industry, housing and utilities, accurate accounting and facilities protection sectors. Talking about additional services we should mention that Internet discount services continue to lead. Such service as "City mobile number", which provides the opportunity for a businessman to have a simple easy-to-remember six-digit mobile number, is also popular.

«We can meet the communications demands of a company of any size but first of all we target small and medium-sized businesses», — Solovyev reports.

Infrastructure projects

The current trends identified by the federal press are confirmed by the "Megafon" company as well.

«In relation to Omsk the growth of the company proceeds from providing services to B2B-segment is double the growth of the proceeds in mass market», — reports the provider's press service.

The current situation can be explained by several factors.

Firstly, the number of services for corporate clients is growing.

Telemetry service and remote device management (M2M) has been added to a basic set of services provided. The number of registered M2M SIM-cards in "Megafon" increased by 200 percent for 9 months of 2014 compared with 2013.

Secondly, data transmission services are becoming more popular. Smartphone and tablet penetration has increased significantly over the past 2 or 3 years, while employers have changed their approach to mobile Internet services which are included in their corporate tariffs. Earlier it was considered to be a kind of entertainment but now it is viewed as exigencies of service. Employers have the interest to register mobile corporate e-mails which are always at hand. They are also interested in mapping and positioning services (for transport companies).

Thirdly, "Megafon"'s inter-provider market entry (B2O) has influenced the increase as well. "Megafon" is one of the top Internet providers that have their access to the Internet backbone networks and sell traffic to local Internet operators.

Finally, the launch of the website "Gosuslugi" and implementation of digital data exchange systems by government agencies and institutions has provoked a significant increase in demand for building of Virtual Private Networks (VPN) which are used to organize a common IT-infrastructure among all the branches and divisions.

Last autumn "Megafon" won the tender to build VPN for the Department of the Ministry of Internal Affairs and other divisions in the Siberia Federal District. iKS-Consulting estimates that the VPN market in Siberia is approximately 1.3 billion roubles.

Services in one package

Director of the Omsk branch of OJSC "Vympelcom", Kirill Ryazanov, claims that the market remains at the same level with the means that customers spend on cellular communication, but the consumption of services has grown significantly. According to him, the share of the provider in the corporate communications market is increasing.

"This is due to the popularity of package offers. They provide a larger set of services for the same money. The second factor is a decrease in the price of services in roaming, which led to an increase in traffic outside the country. Over the past year, Omsk customers of "Beeline" have started to use mobile Internet 5 times more actively in roaming. As for the distribution of income between the B2B and B2C markets, corporate customers are more likely to spend money on mobile communications. They see it as an investment in business processes. Companies launch projects that require new telecommunications services, and pay more attention to these services, "Ryazanov says. According to him, the increase in the demand for mobile Internet is noticeable. The traffic of data transmission in the network "Beeline" has increased by 2.7 times for the last year. At the same time, voice services remain in high demand.

"In addition to mobile Internet, M2M services, which provide remote device management, and FMC has become more popular. Thanks to the latter, people can call a short number from their mobile phone and from their office phones to a mobile one. This service is mainly used by large companies, but the potential of this convergent service is very large - it might be of interest to small businesses, "Ryazanov points out.

Attention to cloud solutions

However, according to the representatives of MTS, this trend has not yet affected this company. For the first half of 2014, both the mass market and the business market segments- increased by 10-15 percent compared to the same period last year. As for the revenue, MTS was the only company to show an increase in the subscriber's average bill in the second quarter of 2014.

"More than a half of the city-forming enterprises in Omsk, as well as small and medium-sized businesses use the services of MTS. Companies choose the provider and tariffs, based on the interest

in data transmission services. Packets of mobile traffic are becoming the integral part of the contract, as well as voice services. All our corporate customers use high-speed data services. The volume of Internet traffic transmitted by the B2B segment in Omsk has increased 1.5 times over the year, "the press service of the provider emphasized.

There is also a growing demand for cloud services, such as cloud exchange, video surveillance and data storage. Cloud solutions including "Free call 8-800" and "Auto attendant" are especially popular. With the help of the service "Free call 8-800" a customer receives a single telephone line with a multi-channel number, which is free to phone for the caller. And the "Auto Attendant" service combines all the existing phone numbers and processes incoming calls regardless of their amount.

The average annual growth rate of corporate customers' market for mobile operators accounts for 15 percent.

The revenues of the operators from corporate subscribers are much higher than the average for the market. This result can be explained by the fact that business customers consume more expensive services.

Business model, the idea of the founders

The creation of a virtual operator of cellular communications RUSTELEPORT, by exchanging the resources of the backbone for leased capacity of the cellular network infrastructure in the form of issuing branded SIM cards.

1) Actual and not expensive unlimited INTERNET at a price of 200-300 rubles per month for the subscriber is the main advantage of the new cellular operator.

2) We are planning to agree on exchange of the channel of 1 000Gbps 8000km long, from Moscow and all over Russia at the main points of traffic distribution: Krasnodar, Samara, Yekaterinburg, Novosibirsk in exchange for 1 million SIM cards (We should have no difficulty since the expenditures of operators connected with building backbones are much higher due to the specific of their ability). In this approach they have no expenditures at all, except for those occurring due to the exploitation of already-present infrastructure and Rusteleport will definitely make good the deficiency of capacity for providing unlimited tariffs

Calculation of the cost exchange: Rental cost of a channel for 10Gbit/s 1,500-2,000 km long is 500,000-800,000 rub a month in the market. Rental cost of a channel for 100Gbit/s for 1,500-2,000 km in the market is 4-6 mln rub a month in the market. And the rental cost of a channel for 1 Tbit/s (1,000 Gbit/s) is 30-40 mln rub a month correspondingly.

Taking into account the length of the network of Rusteleport, which is 8,000 km, the wholesale price for 1 Tbit/s for 8,000 km will be 200 million rubles a month, which corresponds to the average income gained from 1 million subscribers per month. In fact, it is possible to form a tariff of the source operator which leaves all the costs of voice and SMS the same but makes the Internet traffic unlimited – just like at the start of sales of YOTA SIM cards. All the voice traffic and SMS is reserved for the source operator, but the income gained from the Internet is distributed using the virtual operator Rusteleport.

3) The sales of Rusteleport SIM cards, offering an inexpensive unlimited tariff, through the network of mobile operators and retailers of electronics stores will not take much time - it will be necessary to think how to build new backbones quickly to get the next million of the SIM cards.

4) Such program of backbone (Terabit) lines exchange for 1 million of SIM cards will allow the following: first, to set the retail price of selling Internet resources to Rustelport; secondly, to meet the demand of mobile operators for the backbone channels – it is their long-held dream to create an

outsourced operator whose only responsibility would be ensuring their trunk circuits (They have already given the cellular towers to such servicing companies as the “Russian Towers”)

5) The planned revenue from the sales of 1 million of SIM cards is 200 million rubles a months.

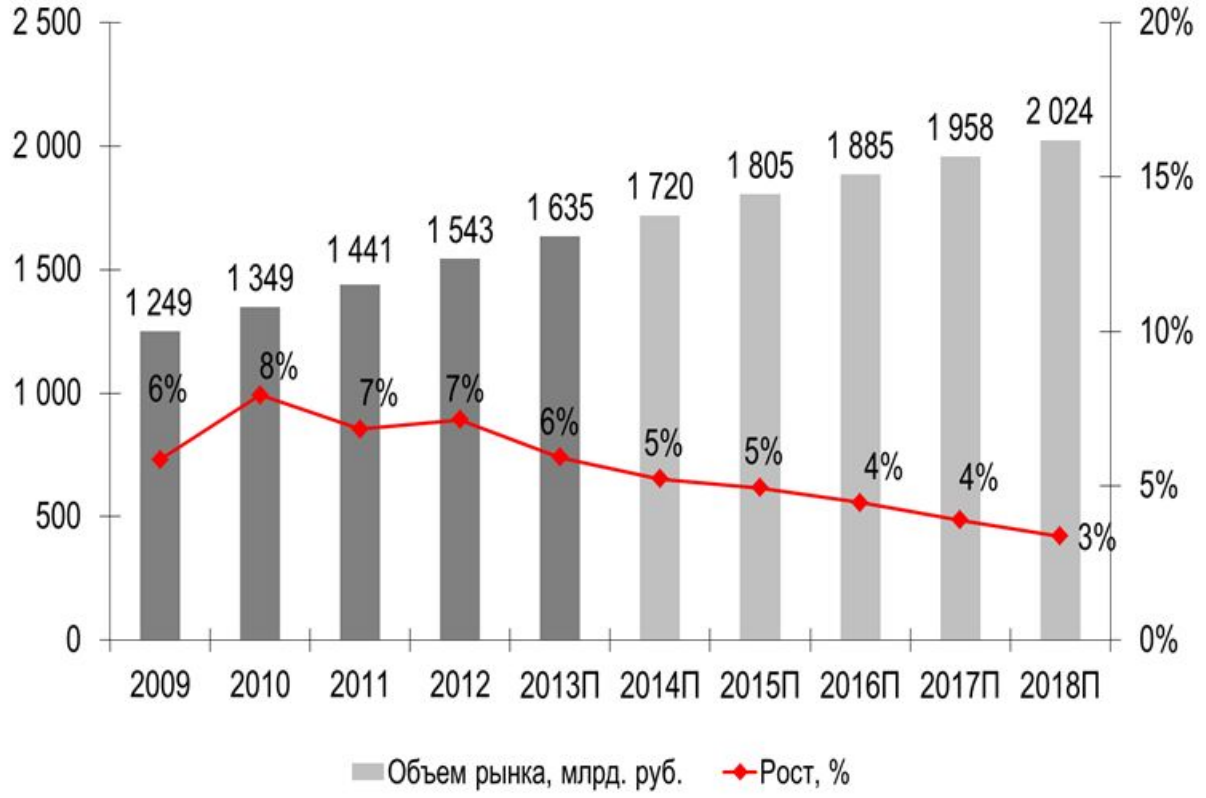
(The planned revenue of Rusteleport gained from 1 Terabit/s between the cities of Moscow and Krasnodar is 20 million rubles a month, Moscow and Samara - 20 million rubles a month, Moscow and Yekaterinburg - 25 million rubles a month, Moscow and Novosibirsk - 35 million rubles a month. It gives a total revenue of 90 million rubles a month.) This difference of + 110 million rubles a month may be the subject of bargaining to reach parity in negotiations with the cellular operators.

6) The retail market presence will require serious advertising and such image advertising will also promote the channels sales for alternative operators.

Let us have a look at some recent publications. The Russian telecommunications market: ICT services based on data transmission networks will be the source of long-term growth. According to preliminary data, the Russian telecommunications market reached the size of 1 635 billion rubles in 2013. The growth rate of the market was 6%, having decreased by 1 pp as compared to 2012, this downdraft will continue in the following years - the average annual growth will be 4% in 2014-2018.

As far as the largest segments of the market are saturated, significant changes in the structure of the industry, the growth rates of revenues are not expected. More than a half of the revenue comes from cellular communications. This segment is growing faster than the rest of the market, mainly due to mobile Internet services. As a result, by 2018, cellular communications will account for almost 2/3 of the communications market.

Telecommunications market dynamics in Russia in 2009-2018.



- Almost 80% of the Russian telecommunications market is formed by the "big four" - Rostelecom, MTS, VympelCom and Megafon, which are present in all major segments of the communications industry. Following the results of 2013, the four leaders jointly control (in terms of revenues):
- 89% of the mobile communications market

- 78% of the local telephone market
- 90% of domestic long-distance and international communication market
- 58% of the market for broadband Internet access
- 38% of the pay TV market

http://mskit.ru/analytics/a156625/

Russia: the total volume of communication services in the corporate segment might reach 360 billion rubles by 2016.

J'son & Partners Consulting Company presented a summary of the study of the competitive situation in the telecommunications market in the B2B segment.

As noted in the company: the development of information and communication technologies is one of the strategic directions of the economy modernization of the Russian Federation. The growth of investment in the development of modern telecommunications infrastructure of enterprises improves their efficiency, accelerates the response to market challenges and increases competitiveness in the long term.

The research was based on a quoted quantitative survey of the corporate sector, which combined both telephone and online methods. The spectrum of the analyzed services included local telephone services, wired Internet access, virtual private networks (VPN) and leased line circuits, as well as mobile voice communications.

The total volume of the research services market in 2012 amounted to 240 billion rubles, 54% of which was for fixed communication. Despite a small share in the overall structure of Russian business (7% of companies) large business accounts for almost half (49%) of the revenues from fixed and mobile services.

According to J'son & Partners Consulting forecasts, the average annual growth (CAGR) should be about 10%, and the total volume of fixed and mobile communication services in the corporate segment might reach 360 billion rubles by 2016.

The report examines the dynamics of income in 2010-2012 and the forecast of its development up to 2016 in the segments of the considered services. The growth of the telecommunications market will be caused by the further development of voice mobile communication services, wired Internet access and the development of virtual communication networks. According to J'son & Partners Consulting, in the context of services, mobile voice communication will show the greatest growth due to the spread of smartphones among employees of regional companies and a decrease in the average price of smartphones.

http://www.cnews.ru/news/line/rossiya_k_2016_g.obshchij_obem_uslug

Experts: Russian telecommunications market will slow down its growth rate in 2014-2018.

12/17/2013, Moscow 18:34:28 The Russian telecommunications market will slow down its growth rate in 2014-2018. Such a forecast is given in the study by the analytical agency iKS-Consulting.

According to preliminary data, the market reached 1 trillion 635 billion rubles in 2013, which is 6% more than the previous year. At the same time, the growth rate decreased by 1 percentage point compared to 2012. "The downdraft will continue in the coming years - the average annual growth in 2014-2018 will be 4%." The low growth rates of the market are explained by the exhaustion of the

sources of extensive growth in all major segments which traditionally were the drivers of the market “, the study says.

According to experts, the penetration of cellular communications in Russia has exceeded 166% in the calculation for SIM-cards and 110% - when calculating for active subscribers. The number of broadband Internet access subscribers has exceeded 27 million, the penetration has reached 49%, while in large cities it reaches 60-80% and often exceeds 50% in cities of regional significance with a population of less than 500 thousand people.

Furthermore, the pay TV market with penetration of 55% is rapidly slowing down its development dynamics. So, if in 2012 the growth of subscribers was 17%, then in 2013 it was only 9%, and in 2014 a further slowdown is expected - up to 6%.

More information on RBC: http://www.rbc.ru/rbcfreenews/20131217183428.shtml

What do the following figures and analytics indicate?

They indicate the fact that the total telecommunications market amounts to more than 1.5 trillion rubles a year and its growth is slowing down while all other industries (except food) have been in long-term stagnation.

How to calculate the segment of backbone services for alternative operators?

You can have a look at the structure of communication costs in the budget of an average family of 3 people and the structure of content consumption. Every month a family spends:

• about 500 rubles for each cell phone,

• 250 rubles for cable TV,

• 500 ruble for the Internet at home,

• 300 rubles for the Internet per each employee in the office

The total sum is 2100 rub, 800 rubles of which is the Internet fee to a local operator at home and at work. Half of them are networks bought by the Big Four, as a result an alternative operator gets 400 rubles a month from a family that is 19%, which corresponds to the estimate in this Article

http://mskit.ru/analytics/a156625/:

Almost 80% of the Russian telecommunications market is formed by the "«Big Four»" - Rostelecom, MTS, VympelCom and Megafon, which are present in all major segments of the communications industry. According to the results of 2013 the four leaders jointly control (in terms of revenues):

• 89% of the mobile communications market

• 78% of the local telephone market

• 90% of domestic long-distance and international communication market

• 58% of the market for broadband Internet access

• 38% of the pay TV market

Our alternative operator is in the segment of broadband access - these are local operators owning 42% of broadband Internet access, in their expenditures the backbone Internet connection amounts to 30%.

In absolute terms, the market for these operators is listed as 20% of 1600 billion rubles. That is, 320,000 billion rubles, 100 billion dollars of which they spend every year on backbone communications. Accordingly, our market segment is 10 billion rubles a months, where there are 10 backbone communication operators in Russia.

Our revenue, with regard to the rules of the game established by the existing players, is expected to be 1 billion rubles a month. This is not reasonably good, considering the planned expenditures for the network which amount to 0.5 billion for each of the 3 major regions (Southern FD, Ural, Siberia) and constitute a maximum of 1.5 billion rubles. But we are attempting to take 1/6 of the market volume by installing 1-2Terabit/s channels with half of the price established in the market, and therefore we can talk about 2billion rubles of revenue a month.

In fact, now traffic growth is creating a slight revenue increase and for cellular companies with 100 Gbit/s channels all across Russia their own more expensive traffic is more valuable than renting it to competitors, and therefore they will even be grateful to us for reducing their backbone networks congestion.

Also, looking at the example of consumption of an average family, one can analyze the quantity of necessary traffic for today:

• In the morning, an average family watches the news on TV, and for now 20% of families use IP TV, they read jokes and check the weather online – it creates a load on the home WI-FI point. On their way to work people check traffic jams and messages in Viber and WhatsApp, listen to music using streaming Internet players – that is mobile traffic.

• At work an accountant's computer is already connected to 1C cloud or 1C server of the parent company from Moscow, and there is also an exchange of large data files on the projects, designs and others - all this is a burden to the broadband provider, including the alternative one.

• On their way from work people use the same amount of mobile traffic for checking traffic jams and navigation.

• Resting at home includes online games for children, films online for adults (there's nothing interesting on TV anyway) and this again creates a significant burden on the broadband Internet provider.

Thus, even though mobile operators receive 80% of revenue for mobile content, they transmit no more than 10% of the subscriber's traffic, and the entire information load still rests with the local broadband provider, which receives 20% of the remaining revenue (80-20% rule)

These figures are also supported by the available experience: - Cellular providers have raised 100 Gbp/s channels, while only one of the Internet exchange points, MSK-IX, has a statistics of 2 000 Gigabit/s bandwidth (2T/s) with the total traffic of about 6-8T/s. Cellular companies provide only 0.4-0.6 T/s and will not be able to replace the broadband providers completely. The current data are given without taking into account the burden of UltraHD (4K) videos and the "Internet of things".

Situation analysis in the industry

Since the development of the market was underestimated in the industry, there are constantly emerging free niches for the provision of services. Currently all alternative regional Internet operators have been abandoned because backbone providers provide traffic only to their retail customers and even then not in full measure. They simply do not have enough resources as they have paid for transmitters and frequencies for 3G and 4G networks. They also do not see the point in maintaining the process of competition in retail, selling backbone lines to medium and small regional competitors,

which in turn are not going to be either sold or bankrupt. Nobody buys these regional operators, and the stabilization of prices and demand for services allows them to survive.

Another large layer of traffic consumers has emerged, Data Processing Centres of different levels. The crisis has forced large and medium-sized companies to drastically cut IT costs by moving their servers more decisively to regional data centres. Such regional data centre networks like ClaudIX require high-quality MSK-EKT-NSK traffic at reasonable prices. Objectively, the two technologies, UHD TV and Internet of things, will create explosive traffic growth in the near future. Single attempts to transmit ultra-HD channels over the satellite in Europe, America and Japan have failed – having 4 HD channels for showing one UHD turned out to be not profitable at all and no advertising pays off the expenditures at least until the next generation of satellites, with increased capacity due to a cascade piloting (when one degree contains not one, but 4-5 satellites), is introduced. But for the moment it is expensive and unaffordable. Therefore, all UHD content broadcasting is conducted through IP over optical cable networks. At the same time, multicast (broadcast) organized content is very little so users "pull" content from the UHD Internet into their own built-in Ethernet TV ports through broadcast (individual requests) channels, incredibly overloading the network infrastructure. The availability of HD media and the ease of cloud usage have already spawned the problem of transport placement, and the processing of "large data".

The Internet of things first of all includes automobile "gadgets", that will overload 4G operators, and smart security systems with virtual cooks (refrigerators, microwave ovens, ovens with built-in requests for recipes of dishes and requests for replenishment in online stores), that will fill local home networks with uncontrollable user traffic.

The term "digital inequality" in Russia is adopted by Rostelecom to justify budget infusions into infrastructure. They have also understood that the backbones became outdated during the periods of crises, and expand their main line from 800 Gbit/s to 2000 Gbit/s only for current needs:

http://pda.cnews.ru/news/index.shtml?top/2015/04/08/594745:

"Rostelecom will purchase DR and AR routers for IP/MPLS network (the first one aggregates traffic from Russian subscribers for its distribution between service devices; the second one concentrates traffic from aggregation switches). These purchases are required to expand the Rostelecom's IP/MPLS network from 800 Gbit/s to 2 Tbit/s and complement the transit backbone network BTM TEA, which connects Europe and Asia. The total budget of the corresponding projects is 6.7 billion roubles. "

Our task is not so global, we are aimed to take on a very specific niche of 1000 Gbit/s (100 channels of 10 Gbit/s) on the Moscow-Ural-Siberian route, as macro-regional access points for almost all Russian alternative providers were historically formed in Samara, Yekaterinburg and Novosibirsk. And the lack of channel resources is regularly noticed in Ural and Siberia because of little attention to the eastern regions from the Moscow managers.

Why the Krasnodar Territory?

The first reason is that it is the most populous region after Moscow and the Moscow region with a population of more than 5 million people, and it is growing continuously. The active part of Russian people is presented here: the retired with high incomes and capital from the north of the country and active young workers from the south of the country. Both are active users of information services and high-tech gadgets, whose traffic is sometimes not controlled by the user (Windows 10, for instance, uploads all the computer contents to the network (to the Microsoft cloud), the latest versions of IOS do the same thing on their devices from mobile phones to tablets and computers. CCTV cameras made

in Korea send all the content to Korean cloud servers, Chinese ones to Chinese clouds of video information storage. Thus, a growing population using modern gadgets create an avalanche of IP traffic in the region, while the operators of the «Big Four» pay little attention to this region. They primarily service such departments as TTC-RZD, Svyaztransneft-Transneft and their subscribers, and do not care about the local alternative operators that are their competitors in the region (Rostelecom and cellular operators). For hundreds of alternative operators that provide much better services to the population, there are only 2 or 3 operators (CDI, Severnoye Volokno (Nothern Fibre)) which are able to offer decent quality at a reasonable price but are unable to change the established order of prices, as a result they are not presented in this region.

Today, on the Moscow-Voronezh-Rostov-on-Don-Krasnodar-Anapa section, there is a proposal to buy ready-made optical fibres, which reduces the cost of the project by 10 times and reduces the construction period to 3 months, which equals to the time of delivery and installation of the needed equipment.

Roadmap and composition of the project

The Essence of the Project

It sounds simple for a specialist: Buying "dark fibre" - selling "light fibre"

The essence of the whole project in brief: taking the place of one of the leading (in the top ten) alternative providers of Russia for alternative broadband operators riding on the wave of demand for growing traffic.

If we consider telecom business, then the backbone IP transit from Moscow to the main nodes of the country is the most profitable.

Nothing has changed in the last several thousand years of our history, people need bread and spectacles. This means that food, information and entertainment industries will always be afloat (the recent crises, which have been very protracted since 2008, have proved by the fact that our colleagues and we have not felt it in the communications industry at all).

The Internet is the quintessence of information and entertainment flow and it is the cheapest and most affordable of all the options (for 500 rubles you can go to the cinema once or download everything from the Internet for the whole month, and even despite the new restrictions, VPN services bypass everything, and all of China started using them long time ago).

Here the main conclusion arises - money from traffic come in the places with a large population.

The second largest-populated region in Russia after Moscow is the Southern Federal District, mainly the Krasnodar Territory (more than 5 million people) will bring the bulk of revenue in the analysis of all regions of Russia.

Krasnodar, roughly, will take up to 3TB/s bands. It is clear that we should shock the market and offer a service at a price of 2 times lower (the current business plan was designed taking this into account).

The unit of service we have is 10 Gigabit/s for a 2000 km section with a price of 250,000 rubles, which is 2.5 lower than the one that the current market offers.

Krasnodar will absorb 300 such channels, which will give the total revenue of 300 * 250000 = 75mln rubles a month, that is 13mln. dollars a year, which allows us to talk about the payback of the project in less than 1 year with 100% of the system load.

Most importantly, it is already defined who to buy ready-made fibres in these areas from and half of the contracts are already signed.

We are planning to switch on the Krasnodar-Moscow section in 3 months. On this site, the commercial director and construction deputy in combination has already agreed with the buyers of traffic, the site is chosen, there is an agreement with the provider for the switch-on of Rostov and the Caucasus. The contract for the Krasnodar fibres and then to Anapa (total distance of 1980 km.) is in my table (with the forward-looking intention to lay the cable by sea to Kerch). We will receive the equipment at 1000 km in the warehouse and the rest of the amplifiers and muxponders in a couple of months. It will take us not more than 3 weeks to install all the equipment.

There are two main seasons for the rise and allocation of traffic by alternative operators in the regions. They are autumn and spring. By the spring of 2018, the broadband traffic market of southern Russia will be ours. In the winter, for the New Year's holidays, we will arrange a show with presents on the finished sites - a free month of testing and free connection, and such actions as "Bring a “friend” operator and both of you will get a discount", etc.

Here is the experience of successful development in the previous 10 years:

www.infomagistral.com/35d.zip

Why do we choose telecommunications projects after all?

Comparative characteristics of most profitable business systems

	Shopping and entertainment centre	**Backbone Internet Service Provider**
Initial expenses	150mln rubles	150mln rubles
Initial volumes	2000 square meters	20 channels of 10 Gb/s for 2000 km
Revenue per month	2 million rubles	4 million rubles
The possibility of expanding	No possibility. It is necessary to build a new venue.	It is possible to expand up to 400 channels of 10 Gbit/s in each of the sections. 6 sections of 2000 km are developed.
Revenues with increased investments	Grow in direct proportion	Grow geometrically and despite a decrease in the price per channel
The maximum revenue with maximum investment	Investing of 2 billion rubles will give a revenue of 30 million rubles a months in the sales area of 26000 square meters	Investing of 2 billion rubles will give a revenue of 360 million rubles a month for 400 channels in 6 sections of 2000 km long.

Competitive environment	Dozens of shopping and entertainment centres in the cities have already almost saturated the market. Growing networks in order to expand the market are forced to go into small towns and villages, for example, Magnet.	There is a dozen of backbone operators in total, 5 of which are major operators which serve their subscribers and do not care about local operators that are competitors for them in the regions (Rostelecom and cellular operators) or serve agencies (TTC-RZD, Svyaztransneft-Transneft). For hundreds of alternative operators that provide much better services to the population, there are only 2-3 saturated operators which are ready to offer reasonable prices for acceptable quality (CDI, Northern Fibre), but unable to break the established prices in the market.
Expenditures	A permanent presence of the owner at the site is required to monitor the income and expenditures for capital repairs, which are necessary every 3-5 years with significant investment. Significant utility bills and staff salaries. Significant taxes on real estate and land. **Total costs are more than half of the revenues.**	The entire system is controlled remotely via communication channels. The whole load is viewable and it is possible to determine the flow of income. There is an opportunity to monitor the quality of services with the help of built-in quality control modes. High quality equipment does not require replacement and repair up to 15 years (amplifiers, power supplies). The fibre service life is more than 35 years. Every 7-8 years it is necessary to change the batteries and the transponders for the ones with a higher bandwidth. The object of communication is not an object of real estate and it is possible to accelerate depreciation up to 7 years, this reduces the profit tax many times and allows to carry out a comprehensive modernization of the network financed from the resources. **Total costs are not more than 10%. Taking into account the leasing payments for changing transponders for the ones of a new generation - no more than 20%**

Production plan

1. **The production and sales program (Table 4). Adopted production technology:**

Obtaining the final product (the Internet leased port between the main Internet sites of Russia in Moscow and in the south) does not require a new fibre-optic cable construction at present.

After an explosive growth of the construction for 3G and 4G networks in regions among cellular operators, there are still some operators servicing sections of such a cable which have free optical fibres. An agreement has been reached with the owners of the fibres, in two alternative sections of Moscow-Anapa.

For "switching on the fibres" it is planned to purchase DWDM 44 channel multiplexing equipment with OUT-4 3rd generation chips with a bandwidth of one laser frequency of 100Gbit/s and a regeneration section length of 2500km.

2. Requirements for the organization of production.

The necessary space for placing the equipment is 1-2 U (the height of 2-4 cm of the 19-inch rack) in the racks of the signal amplification units every 100-120 km of the backbone line. The power requirement is not more than 160 W, voltage - 220 V AC and/or 48 V DC.

The deployment in the cities provisioning traffic occurs in specialized data centres. The space required for 200 channels of 10G is 20U with a power consumption of 360 watts per 1 U.

To control and manage the network, a network with 128 IP addresses is leased from a provider present in the data centre in Moscow with access by login/password from anywhere on the Internet.

3. Set of the main equipment, its suppliers and terms of supply (lease, purchase). Equipment leasing.

The main equipment is a DWDM system consisting of amplifiers (EDFA every 100km) and I/O multiplexers at the end points.

Choosing from various manufacturers, there are currently two options under consideration, either a proven Israeli manufacturer or a well-known manufacturer from the United States. The first one provides the most compact modules and the newest and the longest-range chips of the multiplexers.

Equipment leasing is preferable.

4. Suppliers of raw materials (name, terms of delivery) and indicative prices.

The purchase of fibres in the backbone cables at the Moscow-Anapa section is based on an arrangement with 2 cable owners in the regions.

5. Alternative sources of supply of raw materials.

The two options for obtaining fibres and equipment are mentioned above.

6. Number of employees and labor costs.

A staff consists of 7-8 people: a director, an accountant, 1 or 2 sales managers, 2 people for maintenance of the equipment on the backbone line and one person in every city of presence for connecting the ports. As far as the maintenance, which includes preservation of fibre integrity and smooth power supply, is the responsibility of the organizations which operate the cable and the fibre optical signal amplification platforms, the cost of 100 rubles for 1 km of fibre and 1500 rubles for 1 U covers the need to maintain personnel every 200km. Total costs for the staff salaries, including taxes, amount up to 600,000 a month and the cost of rented units and cable maintenance is 428,000 rubles in the section of Moscow-Yekaterinburg. All these monthly expenditures (of $ 20,000) are presented in the table of total financial turnover.

7. **Cost of the main production assets.**

Corresponds to the cost of capital investments.

8. **The form of depreciation (simple, accelerated). The rate of depreciation. The grounds for applying accelerated depreciation (Table 7).**

It is possible to apply accelerated depreciation for the period up to 7 years for the equipment with a service life of 15 years and for fibres with a service life of 30 years - up to 15 years.

9. **Annual production costs. Fixed and variable costs. The cost of each unit of production is indicated in Paragraph 6.**

The cost of the network maintenance is calculated as follows: rent payment for places used for equipment, the cost of emergency cable repair works, staff wages and bonuses.

Annual costs are described above. It is necessary to introduce a bonus system (e.g. 2-4 percent of income) to motivate the employees.

10. **The cost of construction, the structure of capital investments, provided for in the design estimates and estimated cost calculations, including construction and installation works, equipment costs, and other expenditures (Table 1).**

The total cost of the investment project (table 2). Estimated cost of the project is 520 mln. rub. The construction period is 4 months.

All equipment fits in the trunk of a jeep. Each unit is the size of a home DVD player.

11. **Ensuring environmental and technical safety.**

It is stipulated in the construction technology of the equipment and in operational regulations for electrical installations up to 1000 Volts.

Marketing plan

1. Confirmation of absence of foreign analogues of products for category "A" projects, world level of production and demand for it in the foreign market for category "B" projects, substitution for imported positions in case of lower product prices for category "C" projects, demand for products in the domestic market for category "D" projects.

Patent situation. Protection of the product in the country of the licensee in the domestic and export markets. The ability for competitors to produce relevant products without infringing the applicant's patent rights.

End users. Finding out if the organization is a monopolist in the production of this product. The type of demand (uniformly-distributed or seasonal). Characteristics of the competitors. Features of the market segment to which the project is oriented, the most important trends and expected changes. What properties of the products or additional services make the project preferable to competitors'.

There is demand for services due to the constant growth of data traffic described in the first part of this business plan and it is maintained at the level by the highly specialized players in the service market, which, when reaching the payback point and positive profit, seek to stop the competing offer at a price, losing attractiveness.

Using the latest equipment-OUT-4 chips of the latest 3rd generation allows us to reduce equipment costs in the part of 3 R nodes.

Demand for services slightly decreases in summer, which allows us to upgrade the network.

2. Sales organization. Give a description of the sales system with the indication of the firms involved in the sale of the product.

The main consumers are concentrated at the traffic distribution points and do not require significant switching costs. Regional data centres are ready to accept most of the traffic.

3. Justification of the volume of investment related to the sale of products (Table 2). Trade and marketing costs.

Trade and marketing costs are planned to ensure a profit margin for large wholesale consumers, such as regional data centres and organizations providing traffic to social networks.

4. What possible actions of the competitors need to be anticipated and what are the main elements of the counteraction strategy.

When switching to a new operator, a consumer can request a price reduction from the previous operator. But as a rule operators are reluctant to do so because finally they have to reduce the tariff for all other customers. We are planning not to allow mass, simultaneous switching from third-party operators. First inclusions are going to be carried out under the pretext of reserving existing channels.

5. Justification of the price of products (Table 4).

The wholesale price of the goods is determined on the basis of the current situation on the domestic and foreign markets, as well as the level of profitability sufficient to maintain the stable financial condition and solvency of the organization.

6. Costs and revenues in the case of after-sales service are not required

7. Advertising program. Approximate amount of expenditures.

The main channel market is not massive and does not require a massively expensive advertising campaign. Basically it involves the participation in highly specialized seminars, forums and exhibitions

Commercial on the national television is necessary for SIM cards sales and the expenditures come to 5% of the revenue.

8. Marketing of the products.

Revenues from total sales and for particular goods are calculated in accordance with the data on the volume of production by quarters and years, the level and timing of the development of design capacity and prices as well. Contracts or protocols of intentions for the sale of goods at the proposed prices are agreed upon and are at the signing stage. Signing agreements ahead of schedule can provoke a price reduction initiated by the existing players.

Organizational plan

1. Information about the applicant. Status, authorized capital, composition of the organization, financial position.

Calculations of the coefficients for assessing the structure of the applicant's balance sheet: current liquidity, provision with own funds and their ratio to the amount of borrowed funds as a part of the project financing, restoration (loss) of solvency in accordance with the Resolution of the Government of the Russian Federation of May 20, No. 498 "On some measures to implement the insolvency (bankruptcy) laws of enterprises" (Collected Legislation of the Russian Federation, 1994, No. 5, Article 490). The methodology for calculating the coefficients is set out in Appendix No. 1 to the specified resolution of the Government of the Russian Federation and the Methodological Provisions for

Assessing the Financial Condition of Enterprises and the Establishment of a Weak Balance Sheet Structure approved by the Federal Office for Insolvency (Bankruptcy) Affairs of the State Committee of the Russian Federation for State Property Management dated August 12 1994 No. 31-r.

The company "Information backbone" LLC was created to implement the project of the backbone communication line, tested over the last 10 years, on the Moscow-Yekaterinburg section with the existing stable income of 500 million rubles per year: www.infomagistral.com/35d.zip

But the Moscow-Krasnodar section is more promising, as the Krasnodar Territory has the maximum population of all Russian regions and there are no main competitors in this business.

2. The form of ownership of the applicant. Partnerships require specification of the terms of establishment and partnership; for joint-stock companies - the composition of major shareholders and their shares.

Private

3. For open joint-stock companies, the volume of shares issued and the volume of their issue shall be indicated.

Stockization after 3 years of work is provided.

4. Members of the Board of Directors, short biographical notes.

The sole executive body, Director General, has 25 years of experience in setting up and operating telecommunications companies, including 8 years of work on the establishment of the backbone provider "Severnoye Volokno" ("Nothern Fibre").

5. The holder of the right to sign financial documents.

Sole executive body.

6. Distribution of responsibilities among members of the management team.

Sole executive body.

7. Support of the project by the local administration.

Acquired

The planned results of one of the six sections - the first section (Moscow-Krasnodar) of the network

Payback period, years	2
EBITDA for the 6th year, mln.$	7
to conduct an IPO, mln.$	34

The financial plan of one of the six sections - the first section (Moscow-Krasnodar) of the network

Показатель			Москва	Краснодар
Протяженность магистрали, км.			0	1900
работы			0	158 900 000
Волокна руб.		-	-	112 100 000
Оборудование руб.		-	-	382 800 000
ИТОГО затрат, у.е.:	8 248 333			527 200 000

60 руб/$

2 волокна 1 км	59 000,00	руб	60000	руб								
	-	руб	=B23									
проект 1км	10 000,00	руб			мультиплексоры 1 эт	24 000 000,00	8					
монтаж 1км	7 000,00	руб	итого ру		усилители							
итого работ	32 300 000,00		-									
		руб	-									

ОБОРУДОВАНИЕ МОСКВА- Анапа

итого руб.	итого $				
382 800 000,00	6 380 000,00		оборуд	шт	кол-во каналов
360 000 000,00	6 000 000,00	50 000,00	100G	120	300
22 800 000,00	380 000,00	20 000,00	EDFA	19	

все цены с НДС в Москве

РАСХОДЫ НА СОЗДАНИЕ СЕТИ

Заголовок | строит-во и монтаж (инвестиции) | Доходы | окупаемость

Показатель	2017											
	1	2	3	4	5	6	7	8	9	10	11	12
Количество портов в аренде	40	60	120	150	150	170	180	190	200	210	220	230
Сумма получаемой арендной платы, у.е.	120 000	180 000,00	360 000,00	450 000,00	450 000,00	510 000,00	540 000,00	570 000,00	600 000,00	630 000,00	660 000,00	690 000,00
Сумма получаемой арендной платы, руб	7 200 000	10 800 000	21 600 000	27 000 000	27 000 000	30 600 000	32 400 000	34 200 000	36 000 000	37 800 000	39 600 000	41 400 000
курс	60	60	60	60	60	60	60	60	60	60	60	60

аренда 10G на 2000км.участке		$	Руб
Арендная плата за 1 порт 10G, у.е.	2 год	3 000	180 000
Арендная плата за 1 порт 10G, у.е.	3 год	2 900	174 000
Арендная плата за 1 порт 10G, у.е.	4 год	2 800	168 000
Арендная плата за 1 порт 10G, у.е.	5 год	2 600	156 000
Арендная плата за 1 порт 10G, у.е.	6 год	2 000	120 000

ДОХОДЫ ПРЕДПРИЯТИЯ

2018											
1	2	3	4	5	6	7	8	9	10	11	12
240	250	260	270	280	290	300	300	300	300	300	300
696 000,00	725 000,00	754 000,00	783 000,00	812 000,00	841 000,00	870 000,00	870 000,00	870 000,00	870 000,00	870 000,00	870 000,00
41 760 000 60	43 500 000 60	45 240 000 60	46 980 000 60	48 720 000 60	50 460 000 60	52 200 000 60	52 200 000 60	52 200 000 60	52 200 000 60	52 200 000 60	52 200 000 60

2019											
1	2	3	4	5	6	7	8	9	10	11	12
300	300	300	300	300	300	300	300	300	300	300	300
840 000,00	840 000,00	840 000,00	840 000,00	840 000,00	840 000,00	840 000,00	840 000,00	840 000,00	840 000,00	840 000,00	840 000,00
50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60	50 400 000 60

2020											
1	2	3	4	5	6	7	8	9	10	11	12
300	300	300	300	300	300	300	300	300	300	300	300
780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00
46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60

AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI
2021											
1	2	3	4	5	6	7	8	9	10	11	12
300	300	300	300	300	300	300	300	300	300	300	300
780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00	780 000,00
46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60	46 800 000 60

BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU
2022											
1	2	3	4	5	6	7	8	9	10	11	12
300	300	300	300	300	300	300	300	300	300	300	300
780 000,00	600 000,00	600 000,00	600 000,00	600 000,00	600 000,00	600 000,00	600 000,00	600 000,00	600 000,00	600 000,00	600 000,00
46 800 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60	36 000 000 60

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		2017г											
2	Показатель	1	2	3	4	5	6	7	8	9	10	11	12
3	Инвестиционные затраты, тыс. у.е. и эксплуатация	687,36	687,36	687,36	687,36	687,36	687,36	687,36	687,36	687,36	687,36	687,36	687,36
4	Доходы от аренды, тыс. у.е.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
5	Поток наличности, тыс. у.е.	-687,36	-687,36	-687,36	-687,36	-687,36	-687,36	-687,36	-687,36	-687,36	-687,36	-687,36	-687,36
6	Аккумулированный поток наличности, тыс. у.е.	-687,36	-1 391,91	-2 105,26	-2 827,53	-3 558,82	-4 299,26	-5 048,96	-5 808,02	-6 576,58	-7 354,74	-8 142,62	-8 940,36
7	**процент годовых/коэф в мес**	**15%**	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125
8													

окупаемость 2 года

Заголовок | строит-во и монтаж (инвестиции) | Доходы | **окупаемость**

N	O	P	Q	R	S	T	U	V	W	X	Y
2018г											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
120,00	180,00	360,00	450,00	450,00	510,00	540,00	570,00	600,00	630,00	660,00	690,00
80,00	140,00	320,00	410,00	410,00	470,00	500,00	530,00	560,00	590,00	620,00	650,00
-8 971,11	-8 941,50	-8 729,27	-8 423,26	-8 113,43	-7 738,97	-7 329,46	-6 884,45	-6 403,51	-5 886,18	-5 332,00	-4 740,53
1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125	1,0125

Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
2019г											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
696,00	725,00	754,00	783,00	812,00	841,00	870,00	870,00	870,00	870,00	870,00	870,00
656,00	685,00	714,00	743,00	772,00	801,00	830,00	830,00	830,00	830,00	830,00	830,00
-4 135,58	-3 493,72	-2 814,46	-2 097,36	-1 341,92	-540,92	289,08	1 119,08	1 949,08	2 779,08	3 609,08	4 439,08
1,0125	1,0125	1,0125	1,0125	1,0125	0	0	0	0	0	0	0

AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
2020r											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
840,00	840,00	840,00	840,00	840,00	840,00	840,00	840,00	840,00	840,00	840,00	840,00
800,00	800,00	800,00	800,00	800,00	800,00	800,00	800,00	800,00	800,00	800,00	800,00
5 239,08	6 039,08	6 839,08	7 639,08	8 439,08	9 239,08	10 039,08	10 839,08	11 639,08	12 439,08	13 239,08	14 039,08
0	0	0	0	0	0	0	0	0	0	0	0

AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI
2021r											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00
740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00
14 779,08	15 519,08	16 259,08	16 999,08	17 739,08	18 479,08	19 219,08	19 959,08	20 699,08	21 439,08	22 179,08	22 919,08
0	0	0	0	0	0						

BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU
2022r											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00	780,00
740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00	740,00
23 659,08	24 399,08	25 139,08	25 879,08	26 619,08	27 359,08	28 099,08	28 839,08	29 579,08	30 319,08	31 059,08	31 799,08

BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG
2023r											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
780,00	600,00	600,00	600,00	600,00	600,00	600,00	600,00	600,00	600,00	600,00	600,00
740,00	560,00	560,00	560,00	560,00	560,00	560,00	560,00	560,00	560,00	560,00	560,00
32 539,08	33 099,08	33 659,08	34 219,08	34 779,08	35 339,08	35 899,08	36 459,08	37 019,08	37 579,08	38 139,08	38 699,08

Business plan

Fiber-optic communication line EUROPE-RUSSIA-ASIA area on the London-Moscow (MMTS-9)- Yekaterinburg – Novosibirsk – Krasnoyarsk – Irkutsk-Blagoveschensk(border crossing, China) with the capacity from 1Терабит/s with evolution up to 6 Terabits/s to achieve demand and with a branch Blagoveshchensk – Vladivostok – marine cable South Korea 1-6 Terabit/s and Moscow – Krasnodar

the payback period under these conditions	4
EBITDAto 6 year mln.$	49
the IPO after 6 years mln.$	246

Figure	Moscow	Yekaterinburg	Krasnoyarsk	London,	Moscow	Krasnoyarsk	Blagoveshchensk(border China)	Krasnodar	Blagoveshensk	Vladivostok
The length of motorways, km.	3200		3100	2900		4200		2000	1500	
The cost of buying S and DWDM.e.	11 264 000		11 388 923	10 208 000		26 285 538		8 720 000	9 198 462	
including:										
Fiber	166 400 000		192 200 000		150 800 000		966 000 000	104 000 000	360 000 000	
Equipment	565 760 000		548 080 000		512 720 000		742 560 000	462 800 000	237 900 000	
TOTAL cost.e.:	$		77 064 923,08	Proceni to pay $ for the entire period			7 172 175,97	TOTAL ALL costs $	84 237 099,04	
the construction of the road acoording to plan	2 year		5 009 220 000,00 ₽							
monthly investment.e.	6 422 076,92									
monthly investments, RUB	*417 435 000,00*									
the cost of 1 km.e.	3 520,00 $		65 RUB/$							
2 fiber 1 km	50000 RUB		60000 RUB							
	0 RUB									
the project is 1km	1000 RUB		EQUIPMENT stage 1 MOSCOW - Ekaterinburg							
installation of 1km	1000 RUB	RUB	US $							
100 DWDM channels 10G per 1 km	178800 RUB	565 760 000,00	8 704 000,00		type equipment	pieces	number of channels 10G			
		524 160 000,00	8 064 000,00	42 000,00	100G	192	320			
total for 1 km. of the system	228800 руб	41 600 000,00	640 000,00	20 000,00	EDFA	32				
all prices with VAT in Moscow			EQUIPMENT 2 stage Ekaterinburg-Krasnoyarsk							
price / stage		RUB	US $							
732 160 000 / 1		548 080 000,00	8 432 000,00		type equipment	pieces	number of channels 10G			
740 280 000 / 2		507 780 000,00	7 812 000,00	42 000,00	100G	186	310			
663 520 000 / 3		40 300 000,00	620 000,00	20 000,00	EDFA	31				
1 708 560 000 / 4										
566 800 000 / 16										
5 009 220 000 руб			EQUIPMENT stage 3 London-Moscow							
		RUB	US $							
		512 720 000,00	7 888 000,00		type equipment	pieces	number of channels 10G			
		475 020 000,00	7 308 000,00	42 000,00	100G	174	290			
		37 700 000,00	580 000,00	20 000,00	EDFA	29				
			EQUIPMENT stage 4 Krasnoyarsk-Blagoveshchensk							
		RUB	US $							
		742 560 000,00	11 424 000,00		type equipment	pieces	number of channels 10G			
		687 960 000,00	10 584 000,00	42 000,00	100G	252	315			
		54 600 000,00	840 000,00	20 000,00	EDFA	42				

title | build-in and installations | income | return

Figure	2017											
	1	2	3	4	5	6	7	8	9	10	11	12
The number of ports in the lease	20	80	160	200	300	400	500	600	700	800	900	1000
Amount received from rent, from.e.	60 000	240 000,00	480 000,00	600 000,00	900 000,00	1 200 000,00	1 500 000,00	1 800 000,00	2 100 000,00	2 400 000,00	2 700 000,00	3 000 000,00
Amount received from rent, RUB	3 900 000	15 600 000	31 200 000	39 000 000	58 500 000	78 000 000	97 500 000	117 000 000	136 500 000	156 000 000	175 500 000	195 000 000
course	65	65	65	65	65	65	65	65	65	65	65	65

the price		$	RUB
Rent for 1 port 10G.e. for every 3000km	2 год	3 000	195 000
Rent for 1 port 10G.e. for every 3000km	3 год	2 900	188 500
Rent for 1 port 10G.e. for every 3000km	4 год	2 800	182 000
Rent for 1 port 10G.e. for every 3000km	5 год	2 600	169 000
Rent for 1 port 10G.e. for every 3000km	6 год	2 000	130 000

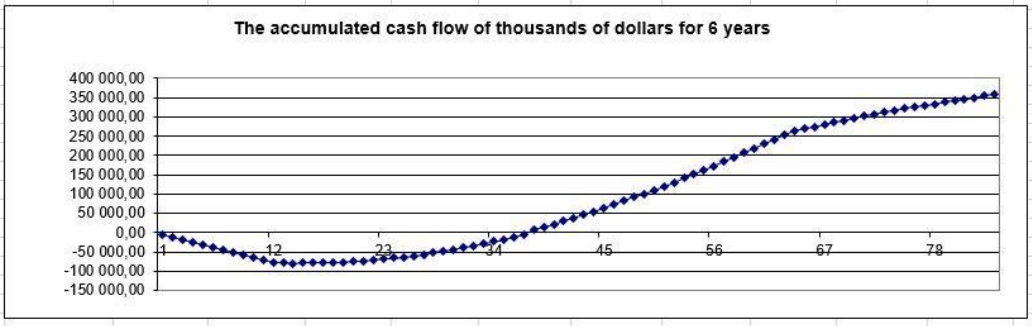
THE ENTERPRISE INCOME

N	O	P	Q	R	S	T	U	V	W	X	Y
2018											
1	2	3	4	5	6	7	8	9	10	11	12
1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
3 190 000,00	3 480 000,00	3 770 000,00	4 060 000,00	4 350 000,00	4 640 000,00	4 930 000,00	5 220 000,00	5 510 000,00	5 800 000,00	6 090 000,00	6 380 000,00
207 350 000	226 200 000	245 050 000	263 900 000	282 750 000	301 600 000	320 450 000	339 300 000	358 150 000	377 000 000	395 850 000	414 700 000
65	65	65	65	65	65	65	65	65	65	65	65

Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
2019											
1	2	3	4	5	6	7	8	9	10	11	12
2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500
6 720 000,00	7 000 000,00	7 280 000,00	7 560 000,00	7 840 000,00	8 120 000,00	8 400 000,00	8 680 000,00	8 960 000,00	9 240 000,00	9 520 000,00	9 800 000,00
436 800 000	455 000 000	473 200 000	491 400 000	509 600 000	527 800 000	546 000 000	564 200 000	582 400 000	600 600 000	618 800 000	637 000 000
65	65	65	65	65	65	65	65	65	65	65	65

AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
2020											
1	2	3	4	5	6	7	8	9	10	11	
3600	3700	3800	3900	4000	4100	4200	4300	4400	4400	4400	
9 360 000,00	9 620 000,00	9 880 000,00	10 140 000,00	10 400 000,00	10 660 000,00	10 920 000,00	11 180 000,00	11 440 000,00	11 440 000,00	11 440 000,00	11 440 00
608 400 000	625 300 000	642 200 000	659 100 000	676 000 000	692 900 000	709 800 000	726 700 000	743 600 000	743 600 000	743 600 000	743 60
65	65	65	65	65	65	65	65	65	65	65	

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Figure	2016											
2		1	2	3	4	5	6	7	8	9	10	11	12
3	Investment costs thousand.e. and operation with extension	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08	6 422,08
4	Rental income, thousand.e.	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
5	Cash flow, thousand.e.	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08	-6 422,08
6	The accumulated cash flow, thousand.e.	-6 422,08	-12 897,67	-19 400,25	-25 929,92	-32 486,79	-39 070,99	-45 682,62	-52 321,80	-58 988,65	-65 683,27	-72 405,78	-79 156,31
7	**the percentage of annual/cal.**	**5%**	1,00416667	1,00416667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667
8	$ %	**(216 517,12)**	-54	-81	-108	-135	-163	-190	-218	-246	-274	-302	-330
9				payback 4 years									



N	O	P	Q	R	S	T	U	V	W	X	Y
2017											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
60,00	240,00	480,00	600,00	900,00	1 200,00	1 500,00	1 800,00	2 100,00	2 400,00	2 700,00	3 000,00
20,00	200,00	440,00	560,00	860,00	1 160,00	1 460,00	1 760,00	2 060,00	2 360,00	2 660,00	2 960,00
-79 466,04	-79 596,32	-79 486,14	-79 255,00	-78 721,64	-77 884,82	-76 743,25	-75 295,68	-73 540,83	-71 477,42	-69 104,16	-66 419,76
1,0041667	1,0041667	1,00416667	1,0041667	1,00416667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667
-331	-332	-331	-330	-328	-325	-320	-314	-306	-298	-288	-277

Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
2018											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
3 190,00	3 480,00	3 770,00	4 060,00	4 350,00	4 640,00	4 930,00	5 220,00	5 510,00	5 800,00	6 090,00	6 380,00
3 150,00	3 440,00	3 730,00	4 020,00	4 310,00	4 600,00	4 890,00	5 180,00	5 470,00	5 760,00	6 050,00	6 340,00
-63 533,38	-60 343,77	-56 849,66	-53 049,78	-48 942,87	-44 527,63	-39 802,79	-34 767,05	-29 419,12	-23 757,70	-17 781,48	-11 489,15
1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667	1,0041667
-265	-251	-237	-221	-204	-186	-166	-145	-123	-99	-74	-48

AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
2019											
1	2	3	4	5	6	7	8	9	10	11	12
40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00	40,00
6 720,00	7 000,00	7 280,00	7 560,00	7 840,00	8 120,00	8 400,00	8 680,00	8 960,00	9 240,00	9 520,00	9 800,00
6 680,00	6 960,00	7 240,00	7 520,00	7 800,00	8 080,00	8 360,00	8 640,00	8 920,00	9 200,00	9 480,00	9 760,00
-4 829,19	6 680,00	13 920,00	21 440,00	29 240,00	37 320,00	45 680,00	54 320,00	63 240,00	72 440,00	81 920,00	91 680,00
1,00417	0	0	0	0	0	0	0		0	0	0
-20	-6680	-13920	-21440	-29240	-37320	-45680	-54320				

AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI
2020											
1	2	3	4	5	6	7	8	9	10	11	12
120,00	120,00	120,00	120,00	120,00	120,00	120,00	120,00	120,00	120,00	120,00	120,00
9 360,00	9 620,00	9 880,00	10 140,00	10 400,00	10 660,00	10 920,00	11 180,00	11 440,00	11 440,00	11 440,00	11 440,00
9 240,00	9 500,00	9 760,00	10 020,00	10 280,00	10 540,00	10 800,00	11 060,00	11 320,00	11 320,00	11 320,00	11 320,00
100 920,00	110 420,00	120 180,00	130 200,00	140 480,00	151 020,00	161 820,00	172 880,00	184 200,00	195 520,00	206 840,00	218 160,00
0	0	0	0	0	0						
						0					

ФЕДЕРАЛЬНАЯ СЛУЖБА ПО НАДЗОРУ В СФЕРЕ СВЯЗИ, ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ И МАССОВЫХ КОММУНИКАЦИЙ

ЛИЦЕНЗИЯ

№ 126757 от "26" января 2015 г.

На оказание

услуг связи по предоставлению каналов связи

Настоящая лицензия предоставлена

Обществу с ограниченной ответственностью

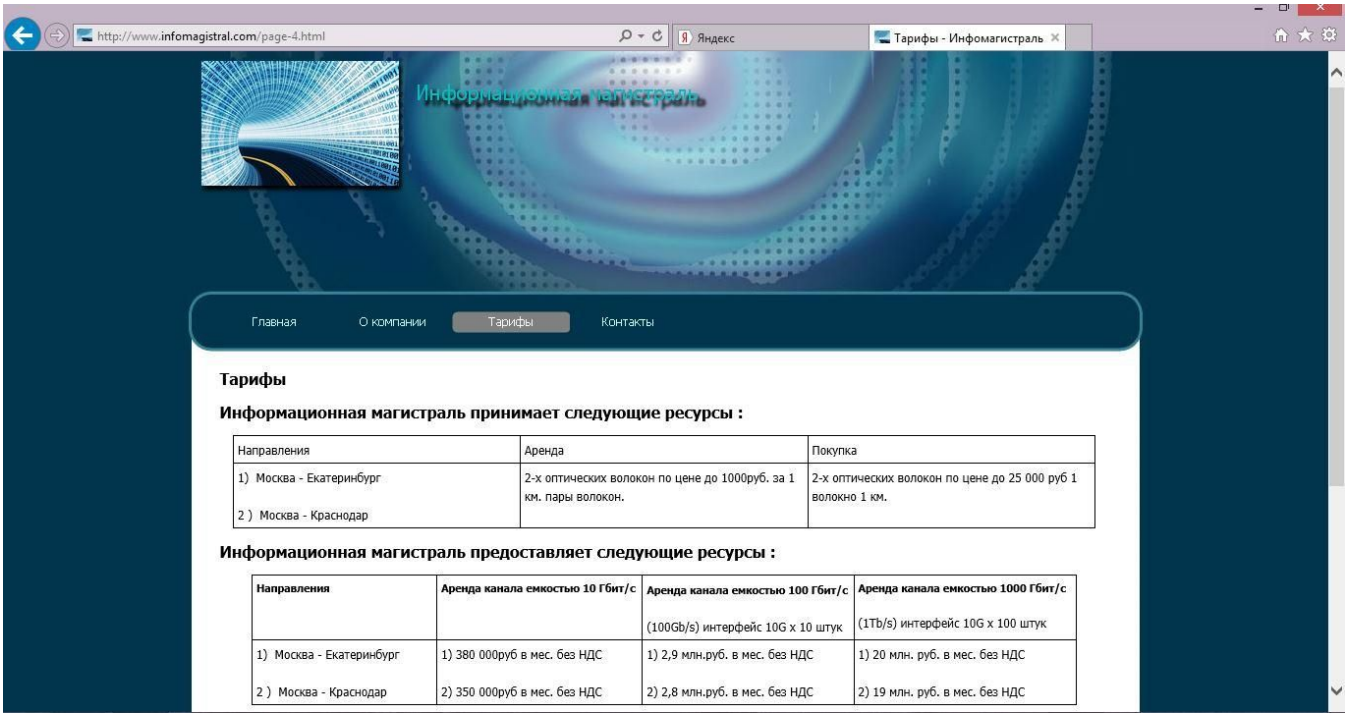
"Информационная магистраль"

Основной государственный регистрационный номер юридического лица (индивидуального предпринимателя) (ОГРН, ОГРНИП)

1147232055310

Идентификационный номер налогоплательщика (ИНН)

7203329516



Тарифы

Информационная магистраль принимает следующие ресурсы :

Направления	Аренда	Покупка
1) Москва - Екатеринбург 2) Москва - Краснодар	2-х оптических волокон по цене до 1000руб. за 1 км. пары волокон.	2-х оптических волокон по цене до 25 000 руб 1 волокно 1 км.

Информационная магистраль предоставляет следующие ресурсы :

Направления	**Аренда канала емкостью 10 Гбит/с**	**Аренда канала емкостью 100 Гбит/с** (100Gb/s) интерфейс 10G x 10 штук	**Аренда канала емкостью 1000 Гбит/с** (1Tb/s) интерфейс 10G x 100 штук
1) Москва - Екатеринбург 2) Москва - Краснодар	1) 380 000руб в мес. без НДС 2) 350 000руб в мес. без НДС	1) 2,9 млн.руб. в мес. без НДС 2) 2,8 млн.руб. в мес. без НДС	1) 20 млн. руб. в мес. без НДС 2) 19 млн. руб. в мес. без НДС

Annex 1

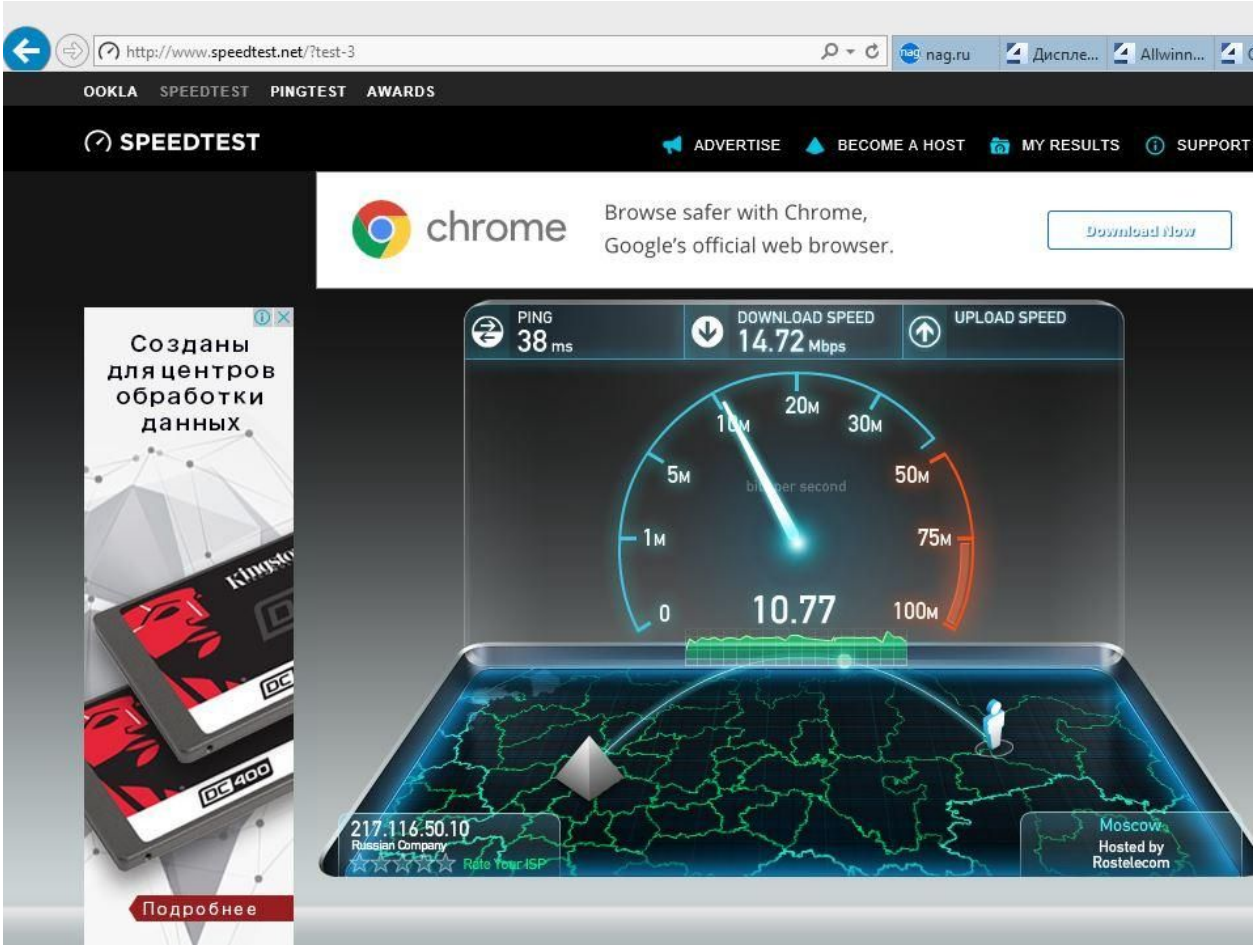
(the threat of backbone network shortage)

The multimedia component of broadcast traffic has a growth potential of 4 times in 2017-2020 due to mass production of UltraHD (4K) consumer equipment due to mass production of specialized chips in 2016.

Today when Internet users sign contracts for 100Mbit/s bandwidth of traffic with the provider, they really get only 10Mbit/s. While you need a bandwidth of at least 44Mbit/s for each device to watch streaming video.

Today, 1-2% of the population use Smart TVs and tablets to watch video on the Internet. In the next 4-5 years this number of users will grow tens of times due to the growing up of a more informationally and technologically literate generation. Thus it will be required to increase the bandwidth by 4-5 times to ensure the work of the new 4K protocols. But who will provide the growth of traffic transmission by 50 times?! Only now Rostelecom has realized this fact and is planning an increase up to 10Mbit/s (with a real 1-2 Mbps) for its users. Rostelecom has received a loan of 20mlrd. rubles in order to raise the bandwidth of its backbone from 800 to 2000 Gbit/s (from 0.8 to 2 Terabytes/s). At the same time watching 4K videos requires 5 times more, i.e. for Rostelecom (with its share of 25% in the market) subscribers only - 10 000Gbit/s (10Tb/s. Thus Russia will be able to consume 40 Tb/s bandwidth in all directions from Moscow by 2020.

Therefore, the plans to have a system of at least 4 Tbit/s by 2020 cover only 10% of the country's needs.



(the actual speed of a subscriber with the contract for 100MB \ s)

ICO

Since the beneficiaries of the project are, in fact, the majority of the world, particularly Russia, Europe and China, it was decided to finance its construction through ICO (Initial Coin Offering) or the sale of tokens as it is very technological, fast and unencumbered by excessive barriers to attract investment from around the world.

ICO calendar

- August 7, 2017 - Pre-ICO
- September 7, 2017 - ICO
- October 7, 2017 - completion of the sale
- November 7, 2017 - utilization of investments

Characteristics of the token

Product Name: Tele2-Teleport

Exchange ticker: TELE2

Issued amount: 100,000,000 units

Additional issue: not provided

Severability: up to 10,000 shares

Block chain: Waves

Legal disclaimer

TELE2 token is not a means of payment, cryptocurrency, security and is not subject to the law, regulating the financial market, cash transactions, the securities market of a country, it is considered to be intangible property (asset) that is freely traded and purchased as property, and is exchanged for other material benefits under certain conditions described in this document. The buyer of the token (investor) is aware of the legal risks associated with ICO and is solely liable in the event of claims of non-compliance with his country's legislation related to the purchase of such kind of tokens. The ICO organizer and the seller of the tokens disclaims any responsibility for the decision to purchase the token and is not liable for any losses or other damages caused to the buyer at or after the purchase (investment). The investor is aware that the purchase (investment) of the tokens traded under ICO is a high-risk investment and the investor can incur losses up to the total loss of the invested funds. The ICO organizer and the token seller reserves the right to collect information identifying the investor before sending him the purchased token. The token buyer (investor) is fully responsible for keeping passwords and private keys to the token storage (wallet) on the blockchain. The ICO organizer and the token seller and the buyer (investor) of the tokens have agreed that the buyer's address for sending the tokens belongs to the buyer and is fully accessible. The buyer has no right to claim for the absence of the tokens sent to this address by the ICO Organizer and the seller, If the transactions are confirmed on the blockchain

Interested audience

1. Physical and legal persons wishing to receive income from investments in monetary terms;

2. Individuals wishing to receive a profitable offer of unlimited Internet traffic in the mobile communications market first;

3. Legal entities engaged in sales of SIM-cards at sales points, wishing to offer a profitable unlimited Internet traffic, which is not available from competitors;

4. Legal persons communication operators that provide Internet connection services or use a high-speed Internet channel, wishing to expand their channel and the speed of data transfer and make a profitable offer to their customers;

5. Foreign telecom operators wishing to reduce the data transfer path and direct the flow of data through Russia from China to Europe and vice versa.

Function of the token. What the investor receives.

The token bought by the investor after the construction project can be exchanged in three ways:

1. During the repurchase with a coefficient of 2.5 in a calendar year after the completion of the ICO - a simple return on investment in monetary terms.

2. To exchange a token for a mobile SIM-card with prepaid mobile Internet traffic throughout Russia for 2 months, at the rate of 1 token = 1 SIM-card - getting a working profitable mobile product by users/physical persons; Receiving a large number of SIM-cards for further resale at sales points to customers.

3. Exchange for the purchase of 10 Gbit/s Internet traffic by telecom operators and other legal entities at the rate of 1000 tokens = 10 Gb/s 1500 km for a month using the communication channel - obtaining a cheap communication channel for companies that provide communication services to the public and legal entities.

How to get tokens

There are 4 options for obtaining the tokens:

1. During the Pre-ICO with a bonus of 25% - by direct contact with the ICO organizer, or through the contact form of the project site;

2. During the sale (crowd sale) - by registration of a personal account as an investor and making a payment for the desired number of tokens.

3. After the completion of ICO - unsold tokens, directly from the ICO organizer.

4. Create a warrant for the purchase on the Waves Platform and others, where the token will be placed, and purchase at a market price from market participants.

Special offers

During the ICO, the first investors are planned to be encouraged. They will get extra (“bonus”) tokens, the number of which depends on the date of purchase:

- 1st day - 25%
- Week 1 - 20%
- Week 2 - 15%
- Week 3 - 10%
- Week 4 - 5%
- Week 5 - 0%

*of the number of purchased tokens.

Distribution of proceeds from the sale of tokens

- 80% - investments in the construction and purchase of equipment;
- 10% - operating expenses;
- 10% - remuneration to the project team.

ICO project team

Sergey Sorogin - the founder of the project, responsible for the organization of construction of the backbone. CEO.

Dmitriy Plotnikov - RTCom supply and adjustment of the equipment.

Vladimir Doroshev - the chief engineer of the project.

Slavik Begshteyn – DWDM engineer.

VALENTIN STEPANENKO

Commercial director, built optic channel in Khanty-Mansiysk region.

YOCHAI SHEETRIT

Main developer of DWDM equipment.

Nikolay Pavlovich Kaledin – Technical Director of MTS OJSC in the Tyumen region. (Mobile TeleSystems)
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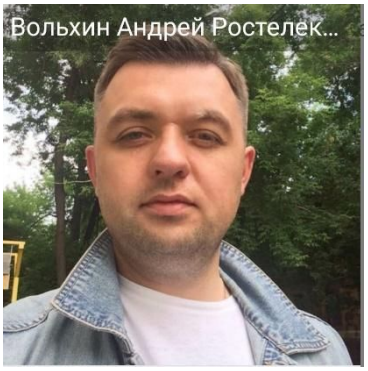

Ростелеком Andrey Volhin - Deputy Director of planning department Rostelecom Ural branch.

Роскомнадзор Sergey Anisimovich Sushko – Leading Specialist of the Federal Service for Supervision of Communications, Information Technology, and Mass Media in the Tyumen Region. 1990-2011. ehant@mail.ru

Alexey Tyumentsev - a partner in the technical implementation of ICO, legal and tax issues advisor

Egor Shoba - Back-End and Blockchain developer

Anton Zolotov - Front-End developer, designer