



First Russian Mobile WiMAX Network

The Company

Yota is the brand for Russian telecommunications company Scartel, LLC, delivering mobile broadband services via cutting edge 4G Mobile WiMAX technology. Founded in May, 2007, Yota is headquartered in St. Petersburg and also operates a branch office in Moscow. The company now employs over 650 people.

The company is owned by international WiMAX Holding Ltd. On November 01, 2008 Rostekhnologii («Russian technologies»), a Russian state corporation founded as a non-profit NGO with the goal of supporting domestic technological development, purchased a 25.1% share in Yota.

On September 02, 2008, Yota launched its Mobile WiMAX network in the 2.5 – 2.7 GHz frequency band in Moscow and St. Petersburg. Since then Yota also began deployment in two other cities: Ufa and Sochi.

Yota is the first Mobile WiMAX (IEEE 802.16e-2005) network in Russia, with current services covering a total population of 20 million people. It offers internet access at speeds of up to 10 Mbps per user device, and boasts smooth handovers between base stations without session breaking.

Yota's philosophy is to focus on mobile services as the core of its business, while the network is considered to be only a means of transport to deliver services to Yota subscribers.

WiMAX Broadband Services Offered

Yota offers fixed, nomadic, and fully mobile wireless broadband Internet access. It is particularly proud of the stability of its full mobile access, quoting field tests that demonstrated stable connectivity at speeds up to 120 km/h within the coverage area. Yota's network provides broadband Internet access speeds of up to 10 Mbps, which makes it possible to offer streaming movies, TV programs, and online music in its mobile services catalogue.

To encourage subscribers to join, Yota launched network services with a special promotion. Until the 31st March 2009, Yota is offering its Mobile WiMAX Internet service for free to anyone in Moscow and Saint Petersburg. Subscribers must first purchase their own WiMAX device, but will then be able to register online for free service. On April 1st free service will end, and the following service plans will become available:

1. **Yota Mini.** 900 RUR per month (VAT included). This service plan will grant unlimited Internet access with no speed or volume of traffic restrictions, as well as unlimited access to Yota's basic catalog of online music. To build its music offering, Yota made agreements with some of the world's largest record labels.
2. **Yota Day.** 100 RUR a day (VAT included). This service plan is targeted at infrequent users, and allows 24-hour unlimited internet access with no speed or volume of traffic restrictions.
3. **Yota Max.** 1400 RUR per month (VAT included). Yota Max grants the subscriber unlimited Internet access (without speed and volume of traffic restrictions), and the opportunity to connect two devices simultaneously: HTC MAX 4G and Mobile WiMAX modem (or a notebook with embedded modem); and unlimited access to Yota mobile services. This includes access to its mobile TV offering.

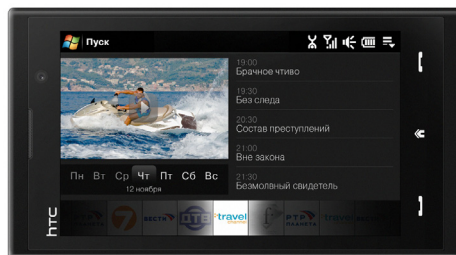
Yota has introduced a range of end-user devices for Mobile WiMAX:

- 4G USB-modem Samsung SWC-U200
- 4G Express-card Samsung SWC-E100
- HTC MAX 4G handset*
- Laptops with embedded Mobile WiMAX
- ASUS Mobile WiMAX Wi-Fi center



Yota's core business is to provide mobile services. It has accordingly developed a range of services based on the opportunities provided by high speed wireless Internet access:

- **Yota Mobile Internet:** High-speed wireless access to the web via Mobile WiMAX technology. Yota provides reliable broadband connectivity anytime, anyplace within the coverage area, even on the move. The connection remains reliable (without session breaking) and reaches speeds of up to 10 Mbps.
- **Yota Video:** A full video on demand (VOD) service allowing users to watch their



* HTC MAX 4G is the world's first dual-mode GSM/Mobile WiMAX handset. It is made exclusively for Yota by HTC. It allows users of any GSM network to insert their own SIM cards for voice calls; and, when a call is initiated between two 4G Max users, the device instead initiates a VoIP session over the Mobile WiMAX network.

favorite movies and videos from a personal Yota catalogue anytime, anywhere.

- **Yota TV:** Allows access to different types of TV channels (satellite, on-air, cable etc.) right on the mobile handset's screen. Video quality is high, surpassing that of most analogue video channels currently available in Russia. Yota's service supports 12 channels now, and plans to expand this in the future.
- **Yota Music:** An extensive online music catalogue of hundreds of thousands of titles from both major and independent music labels. All music is licensed and protected from unauthorized copying. The music is provided online, and the service offers intuitive filters and search options. The music is streamed as soon as it's chosen, so the consumer does not need to spend time waiting on downloads.
- **Yota Video:** A full video-on-demand (VOD) service, which allows users to watch their favorite movies and videos from a personal Yota catalogue anytime, anywhere. Yota Video enables users to watch DVD-quality streaming video with an array of advanced customizable options. High data transmission speed coupled with a traffic prioritization system (QoS) makes it possible to watch full-length movies online. This service is now available in trial mode.
- **Yap-Yap:** This is a photo-blogging service that allows users to record and organize their lives. It allows users to synchronize and edit their contacts through the Web as well as share video clips and photos.

The End-to-End Network

By the end of 2008, after just 18 months of operations, Yota has achieved the following results:

- Radio network deployed in the 2.5 - 2.7 GHz frequency band in Moscow and Saint Petersburg
- 150 base stations installed in Moscow and 80 base stations in St. Petersburg with 200 Mbps capability. By early 2009, 1,000 base stations will be deployed in the two cities. The equipment for Yota's Mobile WiMAX network in Russia is supplied by Samsung Electronics Co. Ltd.
- New deployments in the cities of Ufa and Sochi
- Yota's own backhaul network maintained in Moscow and St. Petersburg with peak data rates up to 180 Gbit per second and a total length of 1,207 km.
- Best-of-breed Mobile WiMAX customer premises equipment procured in a range of form factors.
- Pioneering technology solutions developed to maximize performance and reliability (in-house authorization and authentication schemes, associated software, bespoke solutions for mobile services).

Market Opportunity and Company Vision

In comparison with most European countries, Russia has a relatively low level of internet penetration - even

in the main cities. Until Yota's service became available, mobile Internet access in Russia was still slow and expensive. The 3G networks, announced a couple of years ago, are still not very popular and are not even available yet in Moscow.

Yota is the first of its kind in Russia, and is one of the biggest next-generation (4G) Mobile WiMAX networks in the world.

Because of this, Yota's vision is to be considered more than "just another internet provider." As a mobile services company, Yota will continue to focus on next generation data services as the base of its business. Yota currently offers an advanced music directory and online TV for its HTC MAX 4G users. Several new services, such as videocalls, videoconferences, expanded VOD and others will be offered to subscribers soon.

Yota continues to expand its deployments in Moscow and Saint Petersburg, and plans to cover each city entirely by early 2009. The focus for 2009 is regional expansion. Yota's overall target is to deploy networks in 40 Russian cities, beginning in those with populations of over 1,000,000, and moving to those with populations over 500,000.

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