



TransTelecom Bulgaria

The Company

TransTelecom Bulgaria is a telecommunications company that operates its WiMAX network under the brand 1one. The company itself is owned by Bulgarian oil company Petrol Holding AD, a petroleum distributor that has successfully diversified into other industries. When looking to invest in a WiMAX network, TransTelecom had the benefit of being able to base its operation on an existing IP core and associated equipment. This included a call center, pre-established interconnections with other operators, international links for voice and IP, and a small but growing customer base.

With 42Mhz of bandwidth in the 3.5Ghz frequency band, 1one launched its original trial network in 2007 with a fixed WiMAX deployment by Alvarion. This 18x4 sector site test was used to probe the viability of using WiMAX to provide broadband across Bulgaria. Through this trial TransTelecom learned what it considers to be valuable lessons regarding channel size, multi-vendor support, and deployment OPEX.

Following its successful trial, TransTelecom looked to Huawei to begin the rollout of a nationwide 802.16e network to the 7.5 million people of Bulgaria. Since a mid-2008 commercial launch with 120 base stations, an ASN Gateway, and an additional AAA server, TransTelecom has steadily continued to deploy Huawei's mobile WiMAX equipment in urban areas, while transferring the older Alvarion fixed equipment to rural areas.

WiMAX Broadband Service Offered

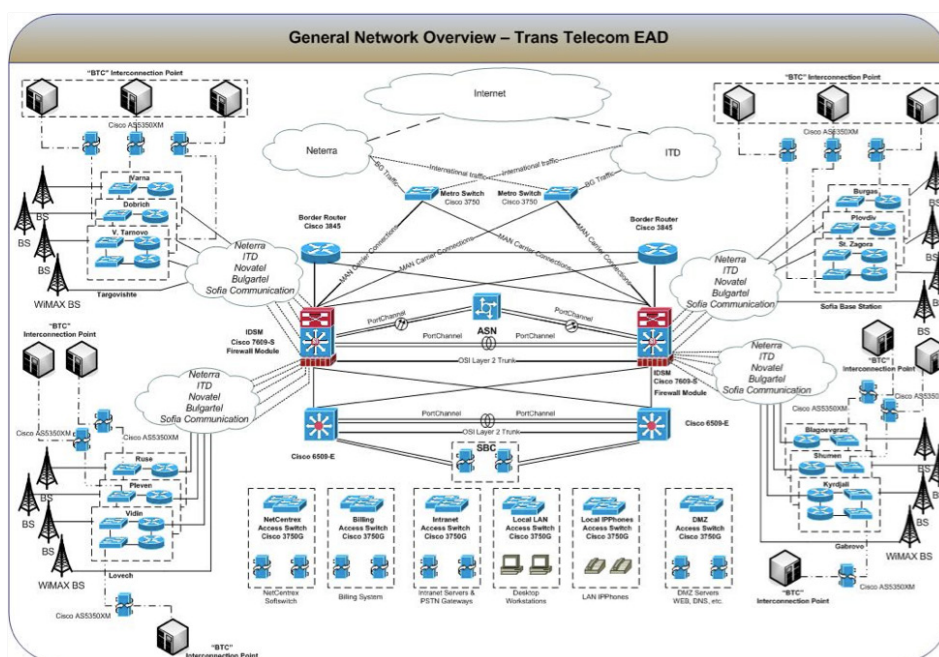
1one currently offers a fixed WiMAX service package over its 802.16e network with plans to offer nomadic service in 2Q2009. The service currently supports high speed internet access, voice, WiMAX-enabled Wi-Fi hotspots, and IPTV. Pricing bundles are currently postpaid, though with the upcoming introduction of nomadic access 1one will begin to offer prepaid plans as well. The basic package starts at a 2Mbps connection for 12.50€ monthly with a 2 year contract. The premium for 4Mbps is relatively small,

with a 1-year contract costing 14.50€ per month. As part of its packages 1one offers VoIP service with no additional monthly fee. The service's fixed CPE remain the property of TransTelecom, and the rental fee that customers pay is bundled into the monthly subscription.

For its upcoming nomadic services, TransTelecom remains in ongoing trials with several device vendors. It plans specifically to eschew the use of PCMCIA cards in favor of dongle usage, such as the Seowon USB modem that will be supported when services commence in 2Q2009, as newer laptops are less likely to have card slots. All of these nomadic devices (dongles, CPE, etc.) will be purchased by the end-user, rather than rented from 1one as is the case for the fixed model, with the possibility of small accompanying subsidies.

The End-to-End Network

The network diagram below gives a general overview of the TransTelecom Mobile WiMAX network. TransTelecom's 120 Huawei base stations, ASN Gateway, AAA server, and 18 Alvarion base stations, are interconnected with its already substantial Cisco-based IP core network.



Market Opportunity and TransTelecom Vision

TransTelecom's business model was based on a top-down approach, with a focus on what share of the 1.5bn € Bulgarian telecommunications industry it believed it could capture in 10 years of operation. Data penetration in Bulgaria is one of the lowest in the EU, so it aimed to make modest growth assumptions for the 10 year period to ensure that business plan objectives are met.

TransTelecom believes that it is in a strong competitive position, and that its primary competition is from fixed line operators. It has one significant wireless competitor of note: fellow WiMAX operator Max Telecom. This is mainly because that while in Bulgaria no less than 5 WiMAX licences were sold, only 2 of the licenses (those owned by TransTelecom and Max Telecom) carried a meaningful amount of spectrum.

Further adding to a positive competitive outlook is the geographical limitations imposed on the fixed line networks, and the fact that the local regulator is putting pressure on the unlicensed LAN operators who have the majority of today's data customers.

TransTelecom is a patient company, and is willing to take a long-term outlook on its WiMAX investment. It believes that its growth will be achieved not only by competition with other operators and attracting existing DSL customers; but also through gaining a substantial slice of the growing telecommunications market. Its business plan foresees a steady expansion over the next 10 years, most of which will be market driven. While its current focus is on delivering fixed and soon nomadic services, T one would also like to eventually use its Mobile WiMAX network to provide full mobile services.



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