

WiFi Services at Baltic Petrol Stations

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Last year this magazine published information about the situation with WiFi services in Estonia, reporting that WiFi areas were being organised at petrol stations in the country. Today, the number of petrol stations which offer the services has increased significantly. This time we look at new trends in the use of WiFi services in Estonia and abroad.

WHY PETROL STATIONS?

In the autumn of 2004, some 80 petrol stations in Estonia were offering WiFi areas [1], but that number has increased significantly. Over the last two years, some 100 petrol stations have been equipped with WiFi areas, and today some 70% of Estonia's petrol stations offer those services. The Neste and Statoil chains first offered WiFi services a year ago and more. Smaller operators are thinking about offering the same services so as to survive in the area of competition. Petrol stations need to be IP-connected in any event, because then they can handle bank card transactions.

WiFi-enabled petrol stations have appeared in the other Baltic States, as well. In the summer of 2005, WiFi services are being offered by the Latvian telecommunications firm Lattelekom at more than 25 Statoil petrol stations (see www.wifi.lv). Lukoil and Statoil in Lithuania have offered WiFi services based on the service providers Omnitel and Bite respectively (www.wifi.lt/en).

Why are WiFi-enabled petrol stations becoming so popular? Chains use IP-connected infrastructure to attract more clients. The facilities serve the communications needs of drivers just as WiFi cafes serve the needs of pedestrians on city streets.

People are becoming increasingly communicative. Travellers communicate with friends and relatives abroad, salespeople check out the latest prices and exchange rates, etc. WiFi initiatives at petrol stations support the need to be connected while on the move. The most advanced users of WiFi networks are

truck drivers. They love to stop in WiFi areas, where they can communicate with family members and with each other for free. A WiFi-enabled petrol station is a hub to the entire world outside the truck. Free phone calls, chat services, search engines, the latest news – all of these are things which make the Internet desirable. In the United States, truck drivers already have their own ISP service chain [2].

WiFi services at petrol stations can offer Internet services at a speed of 1–2 Mbit, while cellular networks can still support no more than 100 Kbit. WiFi is thus a useful tool for tourists who have digital cameras. They can exchange photographs and use blogs to remark on their experi-

ences. High-quality digital photos are often large files, and they can be sent only with a high-speed Internet connections. This makes WiFi services at petrol stations useful for tourists.

The personnel of Wi-Fi enabled petrol stations will be able to use the system for IP phone calls once WiFi phones are sufficiently advanced. IP phones will eventually be freely available at major outlets.

CREATING WIFI PETROL STATIONS

The investment that is needed to install basic WiFi services at a petrol station is now less than EUR 400. The configuration of such a system is illustrated in Figure 2. The router must be installed on the office wall, and the antenna must be outside. A short antenna cable (around 1.5 metres in length) is needed.

If the petrol station decides to charge a fee for its services, then authentication can be ensured through a code on the bill or with the help of a GSM phone. The petrol station's client cards can also be used for authentication. WiFi connections at petrol stations can be used for marketing purposes, too – advertisements and various media services are useful tools for this.



Figure 1. The WiFi.ee sign attracts customers to WiFi-enabled Statoil stations



Figure 2. Components needed to install WiFi at petrol stations – a certified router (in this illustration it is a Linksys WRT 54G), an AC adapter (to the right), and a 6 dB weatherproof omni antenna with a universal attachment and an antenna cable with weatherproof connectors.

Online chatting and blogging can connect users to a WiFi service chain. Bloggers store up the comments of clients about what has happened at places where services are provided. Chatting can be used to connect persons to the entire chain of service. These are new tools which make the WiFi services more and more social.

FUTURE TRENDS

The evolution of IP networks is similar to the evolution of AC/DC networks in the last century. Electricity and IP networks are both “railways” which help economies to evolve. People will always be IP-connected, but prices, speeds and reasons for hook-ups will vary. Petrol stations are rapidly becoming useful WiFi hotspots when people are liter-

ally at a crossroads.

There are automobile manufacturers who are planning to take the next step in 2006. State-of-the-art

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BMW, Audi and Mercedes models will be IP-connected for safety reasons. The cars will have LCD panels which can be used for Inter-

net browsing, and drivers will be able to warn each other automatically about the traffic situation on various roads [3]. □

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3. “Automakers to Create Car-to-Car WLAN by 2006”. See http://www.theregister.co.uk/2004/12/21/car_to_car_wifi.