



The National Swedish Civil Aviation Administration (Luffartsverket; LfV) has introduced wireless broadband at its 16 active airports in Sweden. This service will enable all travelers to surf the Internet while waiting for their flights. By using the Visitor Access service, all passengers can easily connect to the Internet and select their preferred method of payment for their surfing time. The benefit for LfV is full control of the system and adaptability for future needs.

LfV has invested in a new WLAN infrastructure at its 16 active airports throughout Sweden. This investment includes the Visitor Access service, enabling LfV to offer completely operator independent Internet connections, and to tailor the user information. This means that everyone who has a wireless network card in their laptop can easily connect to wireless surfing at the airport. Payment can be made in various ways, for instance by credit card, voucher or through a roaming partner.

– With this solution we can offer all our travelers an Internet connection, regardless of where they come from or how they want to pay. It will for instance also make it possible to target information and use the system to submit work orders to the service engineers. In addition, it allows the airline companies to use it for order and maintenance requests in a quicker and more efficient way, says Maria Wall Petrini, Head of Strategic Business Development, Stockholm Arlanda Airport.



## Flight Travelers Positive to Operator Independent Broadband

Users who want to connect to the Internet only need to start their computers and open the web browser. An information page is automatically displayed, where the users may log on to the wireless network by identifying themselves and then choosing the preferred method of payment. The users are then ready to surf the Internet. No configuration of their computers or handhelds is needed.

Visitor Access was implemented on September 1, 2005, and has been very positively received by the flight travelers.

– The feedback has been almost 100% positive. Most users are happy to find that the network is operator independent and that you can pay by credit card. We invite all operators to our network, and we continually strive to involve as many partners as possible. Another advantage is the fact that the wireless connection is accessible all over the airport, not only in a few areas, as was previously the case. Now it is easy to move without having the Internet connection broken, says Victoria Ström, Project Manager at LfV.

## Flexibility, Scalability and Control Requirements

LfV provides a package solution for public, wireless broadband, developed in a strategic collaboration between HP, Cisco, and Aptilo.

– We shopped around a lot before deciding which solution and particularly which business model we wanted. We decided on Aptilo's solution at Copenhagen Airport, which had everything we required in terms of flexibility, scalability and centralized control of the network and the service. We want a system that we can easily change by ourselves, as technologies constantly evolve and new ones are requested by our customers, Victoria Ström explains.



## Technical Solution:

- Aptilo Service Management Platform
- Aptilo Access Gateway
- Aptilo Service Portal
- Cisco Aironet Base Stations inside all terminal buildings
- Cisco Airspace Base Stations at ramps for service staff
- Cisco Airspace Controllers

Components of the net that is interconnecting the access points:

- Cisco Catalyst 6500
- Cisco Catalyst 3560
- Cisco Catalyst 2950

LFV is already looking for suitable services and is for instance investigating how the wireless network can make the airport more suitable for the disabled.

### Smooth for Owners and Users

A distinct trend today is that people move around more and their availability is required at all times. Public wireless networks with Visitor Access capacity is increasingly requested, as it offers a solution for the network owner as well as the service user.

– LFV had a carefully prepared initial strategy, and has therefore been able to get a comprehensive understanding of the infrastructure. The company created a network of its own, with full internal control. This is an enormous advantage, economically as well as quality-wise, says Jacob Zätterström, Business Manager Networking at HP Services.

In the solution chosen by LFV, Cisco provides the infrastructure, Aptilo the service platform and HP the implementation, service operation and user support. Aptilo's service platform manages the logic and enables the control and monitoring of the system, as well as the identification of the users and payment of the service.

– LFV has chosen a model for its public network that is advantageous for all parties. An increasing number of businesses are following in LFV's footsteps, choosing to be the owners of their networks. This solution ensures that the system is used in an optimal way. It is also very easy for the end user, says Paul Mikkelsen, Vice President Sales EMEA at Aptilo Networks.

### The Wireless Broadband of the Future

Since this solution uses wireless broadband, the bandwidth is large, making the solution a safe option for the future. As it is standardized, it can easily be implemented in different locations.



– The customer orders a feature and we deliver it. They get a proven technology and integration, ensuring that the process is working end-to-end. Today, there is a huge interest in wireless Internet access. In the future, there will be solutions of this type in many public locations – railway stations, bus stations – in any place where people want to make use of their waiting time or traveling time, says Per Åkerstrand, Sales Manager at Cisco.

## Challenge

- Provide easy Internet access to flight travelers and other people at Swedish airports.
- Surfing possibilities for everyone, regardless of operator agreement.
- Give LFV full control of its wireless network.
- A common infrastructure for public and internal network services.

## Solution

- Wireless broadband reaching all over the airport.
- The Visitor Access service enables the users to pay for their connection time in a number of ways.
- Software for centralized control and monitoring of the system.

## Result

- User-friendly Internet connection for users at 16 Swedish airports.
- The user pays by credit card, voucher or through a roaming partner.
- LFV owns the network and can control and modify it centrally and internally for future needs.

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