

# Fare Association North West Switzerland (TNW)

## Complete sales system in the transport association



### THE CUSTOMER

The fare association North West Switzerland (TNW) was founded in 1987 as the first integral fare association in Switzerland. Since then, six transport companies have been offering attractive public transport with an integrative fare system in five cantons. The most important product is the eco-subscription, which can be used without special or timely limitations in the whole association during its validity. Due to cross-border fare cooperations, the transport area of the TNW extends to Germany and France. In 2008, a total of 204 million passengers used public transport in the TNW.

### THE TASK

After around 20 years, the old sales system of the TNW has reached its maximum service life and could not be developed further. The new integral complete solution is to optimise the sales costs of the TNW as well as to offer a future-proof, expandable distribution platform, which is already prepared for future requirements in fare management. With the new system, the TNW also wants to offer more convenience to its customers during ticket sale.

### THE ASSOCIATION PARTNER

- BVB Basler Verkehrs-Betriebe
- BLT Baselland Transport AG
- SBB Schweizerische Bundesbahnen
- AAGL Autobus AG Liestal
- WB Waldenburgerbahn AG
- PostAuto Schweiz AG

## THE SOLUTION

### A background system for all association partners

The background system ATRIES, which is multi-client capable and is used by the six association partners, is the basis of the new sales system. The central administration of collective data (e. g. fares, screen designs of the front-end devices) reduces the administration expenses for the individual transport company and at the same time ensures that the data is always consistent for all clients. Each transport company can only view its own data, which can only be edited by the respective company. The separation of clients is always ensured, so that it is impossible for other companies to access client-specific data.

### New ticket vending machines for more convenience

When the new sales system was introduced, all the old ticket vending machines within the TNW were replaced with modern ATRON vending machines AFA 490. For the first time, the complete fare range, including complex tickets such as group tickets, can be purchased outside of customer centres. The information at the new user-friendly devices is exchanged via touch screen. TNW's customers can select from the following languages: German, French, Italian and English. The user interface (MMI) of the AFA 490 can be individually designed by the TNW. Special texts as well as special tickets, for example for bigger sports events, can be integrated without any problems.

Besides Swiss francs and euros, the AFA 490 also accepts cashless payments via Maestro-Card and Schweizer Postcard. Another novelty is the possibility to extend the eco-subscription via a touchless interface and by means of the customer card (eco-subscription card) directly at the ticket vending machine. This means that the customers don't have to stand in line at the ticket counters every month.



Ticketing at the ATRON AFA 490

## PROJECT OVERVIEW

- Implementing a comprehensive sales solution for all transport companies involved in the association
- Exchanging all stationary ticket vending machines with new ATRON vending machines AFA 490
- Equipping the buses with ATRON on-board computers AFR touch
- Equipping the advance sales centres with AFR touch
- Online data transfer to all front-end devices via GPRS
- Optimised service processes by means of system component management software ASYST

## Selling tickets in the vehicles

With the association partners AAGL, BLT and PostAuto Schweiz, the driver sales systems in the buses were renewed and the ATRON AFR touch was installed. Now, the passengers can buy each ticket offered by the TNW in the vehicles, except for the eco-subscription. In addition to ticketing, the AFR touch also assumes the on-board computer functions. It ensures online communication with the background system and controls peripheral devices such as interior displays, voice announcements and validators.

## Customer centres and kiosks

The AFR touch makes it possible to sell the complete product range of the TNW, including the eco-subscription, in the customer centres of the BVB and BLT. At the same time, the customers can purchase their personalised customer card, the eco-subscription card, at the customer centre. For the card to be printed, data from the eco-subscription data base and the new sales system are brought together and edited, whereas the cards are administered in the background system ATRIES.

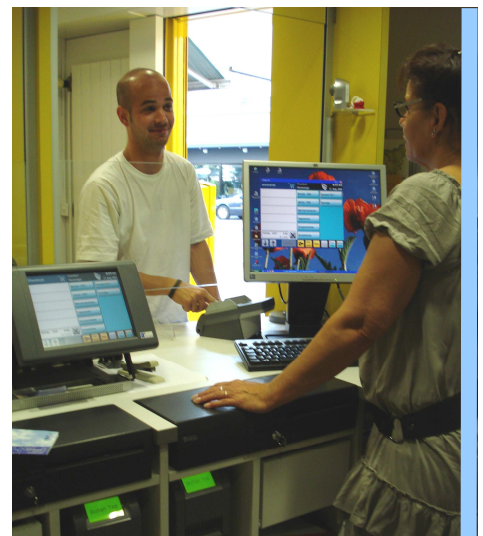
In smaller advance sales centres (kiosks), both transport companies offer a limited range of relevant tickets, depending on the location. Configurations in the background system ATRIES regulate which tickets can be sold and where.

## Online communication

All front-end devices are connected to the background system ATRIES via GPRS. This way, accounting data is transferred to the transport companies promptly, where they are processed further. Another advantage of online connection is that devices can quickly be supplied with current software data without human resources. By transferring differential updates, the data amounts are reduced significantly and communication costs are saved.

## PROJECT SCOPE

- 610 stationary ticket vending machines AFA 490
- 190 driver sales systems AFR touch
- 110 advance sale systems AFR touch
- Background system ATRIES



Customer centre in Basel, Switzerland



The ATRON On-board computer AFR touch

## Optimised service

The new system supports the TNW in performing service tasks selectively and thus in a cost-optimised way. Periodically as well as in case of an error, the devices report their current status to ASYST, the system component management software in the background system ATRIES, via GPRS. The responsible agents in the transport companies can access the device online by remote maintenance or send a technician if required. To further optimise the processes, the TNW service personnel can specifically receive work orders via the ASYST web client, administer these work orders and create service-relevant messages themselves.

Nr.	Standort-Nr.	Online	Stz	1
20	BVB Dreispitz	●		
21	BVB Barfüß...	●		
22	BVB Theater	●		
23	BVB St. Ju...	●		
78	BVB Wiese...	●		
221	Kundence...	●		
349	FA Barfüß...	●		
423	Kloak. Göt...	●		
1503	FA Basel B...	●		
224	Kundence...	●		
1508	FA Basel B...	●		
366	452	●		
1483	FA Noverb...	●		
227	Schalter B...	●		
340	56940	●		
341	10039	●		
342	10071	●		
343	10091	●		
344	6144	●		
345	10066	●		
347	10087	●		
348	12	●		
349	441	●		
350	4331	●		
351	10082	●		

Seriennummer	Ger. Nr.	Name	Online	Status	Betriebsdaten	letzte Schicht
1123558	23558	ATRON FR touch	●	●		20.11.2008
1123122	23122	ATRON FR touch	●	●		04.12.2008
1123167	23167	ATRON FR touch	●	●		13.12.2008

Erst. am	Erz. Zeit	Anzeigetext
25.05.2008	21:48	Gerätezeitout: 25.05.2008 20:48:56

Overview of the system component management software ASYST

## Ready for the future due to expandability

Due to the modular structure of the new sales system, expansions are always possible. Should the TNW decide to do so, it is for example possible to integrate E-ticketing in the existing infrastructure as additional sales mode.

Based on the new sales system, ATRON furthermore realises an automated vehicle location system (AVL/ITCS) for the TNW. The AVL-system provides an extensive overview of the current traffic situation and allows for the control centre personnel to optimise the operational processes. By means of a dynamic passenger information system, ATRON also ensures that the passengers in the TNW are reliably informed of the actual departure times.

Due to the structured, concise presentation of the messages, they can also be viewed and edited on each web-enabled PDA or mobile phone. Outside of the regular work hours (on-call), the service technicians are automatically notified via text message when they are needed. ASYST provides a schedule planning tool, in which the service schedules of the individual technicians are entered with date and duration of their on-call services. If a service is required, ASYST generates a service-relevant message and automatically sends it to the technician on duty. All in all, the systems and components are connected in a way that the service personnel can be informed about the upcoming messages at any time.