



VERKEHRSVERBUND OBERELBE

## DRESDEN, GERMANY

# Network, Timetable and Tariff Integration in Verkehrsverbund Oberelbe

## Background/context

Verkehrsverbund Oberelbe (VVO) is one of five public transport authorities (PTAs) in the State of Saxony (Germany). Founded in 1994, VVO began on May 5, 1998 to implement an integrated network, timetable and tariff system in the Oberelbe region.

## Description of the case

VVO covers a region of 4,800 sq km and 1.2 million inhabitants. The operating companies carry about 196 million passengers a year. The area and the passenger flow revolve around the axis of Dresden, the capital of Saxony.

The following public transport modes, run by 15 bus, tram and/or railway operating companies, are integrated:

- three rapid transit railway lines (S-Bahn);
- 21 regional railway lines and two narrow gauge railways;
- 208 regional bus lines and 66 urban bus lines;
- 13 tram lines in the city of Dresden; and
- 19 ferries crossing the river Elbe.

The main tasks of VVO are the following:

- planning, organisation and management of an integrated public transport system;

- network and timetable integration;
- tariff and fare integration;
- integration of passenger information;
- the ordering and financing of railway services; and
- tendering and contracting of railway services.

## NETWORK AND TIMETABLE INTEGRATION

VVO set up a general public transport plan for the whole area. It is the basis for all more detailed regional and urban transport planning. It defines the integrated organisation and definition of public transport, the basic service levels, the efficient adjustment of all transport modes and the setting of general quality standards.

Network and timetable integration are geared for the following purposes:

- regional railway for speedy regional connections;
- ramway/light rail to move high numbers of passengers within conurbations; and
- area services to feed rail-bound services.

VVO also set up an interchange programme at important connections between transport modes. A short, comfortable and barrier-free interchange is essential for network integration. Therefore, VVO has to date built 34 points of interchange.

### TARIFF AND FARE INTEGRATION

For the transport chain in an integrated system, integrated tariffs and fares are essential. VVO introduced this to customers in 1998.

VVO has 21 large fare zones, a standardised assortment of tickets and uniform tariff regulations. A trip to any central town never crosses more than two zones.

The system's advantages are that it is transparent and easy, customer-orientated and easy for companies to handle.

Unlike the honeycomb tariff or the kilometre tariff, the fare-zone tariff (Flächenzonentarif) is not based on the number of kilometres a customer rides. The price and the validation depend on the number of fare zones the passenger crosses and the trip duration. Tickets are valid on all transport modes in the VVO area, including local and regional bus routes, tram lines, rapid mass transport lines and short distance railway lines. Fare zones, which average in size of about 200 sq km, are generally defined by the boundaries of cities and rural districts.

### Legislation and policy issues

#### LEGISLATION

- German Law of Regionalisation – Regionalisierungsgesetz (RegG)
- Passenger Transport Act – Personenbeförderungsgesetz (PBefG)
- Saxony State law for Public Transport – Sächsisches ÖPNV Gesetz (ÖPNVG)

#### POLICY

Policy makers wanted to create a more attractive public transport system. In fact it was crucial that policy makers were committed to public transport and that decision makers followed through with clear and target-oriented legislation.

### Cost and financing

Implementation of the system cost 1 million and 6 million in compensation needed to be paid due to losses related to check-through and harmonisation. But these costs went down in subsequent years.

#### FINANCING:

- About 600,000 in support from the State of Saxony
- About 400,000 from operators and VVO
- Compensation of check-through and harmonisation losses covered by the State of Saxony

### Results

#### GENERAL BENEFITS:

- Public transport is made more attractive.
- Besides co-ordination of timetables, the new tariff and fare system is the most important step toward integrating public transport in a region.
- A clearly arranged ticket assortment and usage conditions were established.
- Passengers need just one ticket per trip.

- Use of public transport was made much easier, which is especially appreciated by casual users.
- The system provided a free choice of the means of public transport.
- Costs were reduced through cutting back of parallel services.
- Riders who use several means of transport can do so for less money.

#### SPECIAL BENEFITS FOR VVO:

- Revenue increased by 17% from 1998-2003.
- Demand from 1998-2003 grew 7% for all of public transport, 20% for railway services alone.

### Problems

- Particular operators worry about the publishing of their revenues.
- Financing of the implementation was difficult (especially new technologies in vehicles and electronic ticket machines).
- Revenue allocation and negotiation of contracts were contentious (finding a transparent, fair and acceptable system that suits all operators)
- Handling of urban transport services in small cities (pricing philosophy) isn't easy.

### Transferability and success factors

- It is most transferable to similar geographical regions (size and location of fare zones can be individually designed)
- It is most relevant to mono-centric areas (conurbation) with subordinate rural districts.
- All partners (policy and operators) must have the will.

### Lessons learnt

The implementation of an integrated public transport network, timetable and tariff system is a common undertaking of policy makers and public transport operators. Policy should set the framework conditions and operators must get financial compensation. Policy should also balance interests of operators so that they feel their opinions are taken into account.

### Conclusions

The implementation of the integrated tariff and fare system in VVO was very successful. Customer acceptance of public transport increased. The isochronal implementation of an integrated timetable schedule was very useful.

### References and contacts

Company: Verkehrsverbund Oberelbe GmbH

Address: Leipziger Strasse 120

D – 01127 Dresden, Germany

Tel: + 49-351 852 65 11

Web: [info@vvo-online.de](mailto:info@vvo-online.de), [www.vvo-online.de](http://www.vvo-online.de)

SPUTNIC partner: [lutz.auerbach@vvo-online.de](mailto:lutz.auerbach@vvo-online.de)