How to make passenger information your competitive edge?

Hanover, 21-23 June 2000

The conference "How to make passenger information your competitive edge" in Hanover confirmed that passenger information is a highly topical subject. With more than 200 delegates representing 25 countries, it proved a real success. All public transport actors were represented: operators, authorities, manufacturers, suppliers, researchers and consultants. Below is a brief summary of the conference

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Raison d'être and objectives of a good passenger information policy

First, it is apparent from a large number of surveys that one of the main reasons why citizens do not use public transport is the lack or the bad quality of information related to the network and the service. Despite the efforts of the operators to provide adequate information, it is not always possible to meet passengers' expectations. Bulky timetables, crowded network maps, lack of information on service disruptions... these are all examples of factors that are detrimental to the quality of service.

When a system is operated by more than one company, it can in some cases lead to the provision of heterogeneous and incomplete information. In such a situation, the customer has to contact each operator to obtain information corresponding to multimodal journey. Moreover, the use of different graphical and functional standards when presenting passenger information makes it harder to understand and use public transport.

The emergence of new information and telecommunication technologies is changing the context in which passenger information is designed and provided. It creates new user needs and expectations. At the same time, it offers new possibilities for public transport operators to improve the quality of service in order to retain their customers and attract new ones.

However, developing targeted information and using innovative technologies require additional funds. Transport operators are aware of the stakes of providing an efficient passenger information system, but financial resources are limited. Therefore, the financing issue becomes topical.

Peter Warman, First Group Inform Ltd, reminded us that information is a two-way process between the passengers and the operator and is not only a marketing tool but also forms part of the process for managing and controlling the day-to-day operation of services. He also stressed that even if the technology changes, the questions remain the same and should be addressed. He then established a checklist of the elements that form the basis of a passenger information strategy for public transport.

A passenger information strategy should have the following objectives:

- It should facilitate access to and use of the public transport network,
- It should make travelling more comfortable and less stressful by reducing passenger uncertainty.
- It should improve public transport attractiveness (to non-users).

These are general objectives. They should be adapted to each situation and refined according to specific passengers needs. To that end, according to **Bob Crowther**, London Buses Services Ltd, comprehensive surveys should be carried out by public transport operators to assess the needs of passengers and of non-users as far as information is concerned: What type of

Various information tools

information do our citizens expect? Where and when do they need it? Are they ready to pay for it? Do they prefer printed or displayed information? How is information received and understood? How is the collected information then used? All these questions and others should be answered, in order to allow the operators to develop the right passenger information strategy.

The key issue of public transport information: the passengers' needs

Some of the presentations in the conference covered the issue of passengers' needs. Nevertheless, UITP notes that, so far, only a limited number of surveys have been carried out in this field. We believe that improving knowledge of passengers needs and behaviour is essential for building an efficient information system. Marketing and Information Technology departments should work closely to that end. Information about passengers is also essential for developing a competitive edge.

With the gradual introduction of smart cards and electronic ticketing, it is now possible to collect data on the actual flows of passengers "getting on" or "getting off" at any stop. **Eddie So** of MTR Corporation, Hong Kong, presented some examples of what kind of passenger statistics are available from the contactless smartcard based on Hong Kong's Octopus experiment and how the statistics are used to launch innovative marketing activities as well as sophisticated fare system.

New technologies allow public transport operators to precisely measure travel demand at any point on their network. It is up to them to make the optimal use of this information about passengers to enhance their service. In Spain for example, Cercanias is using a counting system based on a "physical pulse". This system gives information on the evolution of demand, the situation at peak hours, vehicle occupancy and the impact of commercial promotions.

Once passenger requirements are known, operators can start designing, developing and providing travel information. According to of the conference speakers, these are the functional requirements that are to be satisfied by a passenger information system:

- First, the information should be complete, correct and up to date. It should also be perceived in that way.
- The information should be clear and coherent in terms of space, design and formulation. It should be designed on the basis of how the passenger sets about looking for information.
- The passenger should have access to relevant information to be able to plan, begin and finish his journey.
- It should be possible for the passenger to learn how to read the information provided.
- The passenger should be informed about changes and traffic disturbances.
- The passenger should be able easily to distinguish the public transport system from other surrounding systems. In the same way, it should be possible for him to distinguish the information provided by the transport company from advertisements.
- During the journey, it should be possible for the passenger to follow the route stop by stop.
- After the journey, it should be possible for the passenger to leave the public transport system quickly and easily.

The channels and tools available

To satisfy these functional requirements, travel information should be developed in various directions and take numerous forms. There are many information tools and channels available to public transport operators.

These should be combined to provide an optimal information mix. It is clear that innovative information technologies have increased the potential for the provision of travel information. Nevertheless, traditional channels are still needed since they respond to different requirements. These channels could be divided into two groups.

The first group covers pre-trip information and the second, the information provided during the trip.

Pre-Trip Information

Printed information in the form of route maps, timetables and posters should be easy to read and understand. Travel enquiry offices should be set up in areas with a high density of commercial and leisure activities. A single telephone number and call centre should be set up to answer all enquiries about public transport in an area, or ideally in the whole country. It is recommended that at least one short telephone number be set up per country. Moreover, call centres should have the phone numbers of existing call centres in other countries. Call centres should be able to provide not only scheduled information, but also real time operational advice and services. In that respect, despite the diversity of operators, a specific body has been set up in some countries or regions to provide coherent and clear information to the passengers. In the Netherlands, OVR, a joint venture founded in 1992 by the Dutch Railways, all regional bus companies and all local public transport companies aims to give all relevant door-to-door information for public transport passengers. **Hans Ridder** of OVR explained how the seamless chain of information is based the integration of all schedules and actual timetable. The single nationwide phone number 9292 is a successful example. Today 9 million answers are provided per year via 9 call centres, 450 part-time staff and the OVR's proprietary infrastructure. Similarly, in Norway, repeated

surveys have shown that 12-14% of all passengers handled by Trafikanten would have chosen to travel by taxi or private car had it not been for the travel advice given. In economic terms, stated **Jarl Eliassen**, Oslo & Akerhus Trafikservice Ltd, these passengers generated ticket revenue 115% higher than the actual cost of the information service.

In the UK, a steering group was created in 1998 to guide the development of the National Integrated Transport Information Project, more commonly known as Public Transport Information 2000 with the same objective of providing uniform, nationwide public transport information. **John Carr,** Metro, explained that the PTI 2000 project aims to reduce the sequence of inquiries to one call to a single national information number.

Travel information should be provided to allow customers to plan their journeys door-to-door. It can be done via public interactive terminals or via an Internet web site. This second option allows the citizen to access the information from their own home or office. Connecting web sites of various operators from different countries will allow comprehensive planning of the whole journey.

Information on major service disturbances could also be forwarded to users via local radio or TV stations.

In each country, the call centre initiative is usually coupled among other things with a web and Wap services project.

In England, the Superoute 66 project consisted of a range of improvements that were made to a bus service in a semi-rural location between Ipswich and Martlesham Heath. **Richard Holland,** Newscastle University, presented statistics on the number of people that accessed the information provided on the Superoute 66 Live and a case study on the impact of that information. A survey showed changes of transport mode and the stimulation of new journeys as a result of the web site.

Information during and after the trip

After they have prepared their trip, customers like to feel secure about the information they were given. The second group concerns information provided during the travel.

At stops, a comprehensive range of information is needed. This should include the name of the stop, the number of buses calling at the stop, timetables, diagrams of routes, information on fares, local area street maps, etc. Ideally, posters with scheduled timetables should be complemented by real time information on actual departure times. **Eric Lamendour** of JC Decaux International, who dealt with the Infobus project, entitled his presentation "Don't hang around for the bus, just hop on!". As a portable system, Infobus gives real

time information on how long the five next buses will be for a given stop. The system is already operational in many French cities and in Brussels. The information is available on a portable receiver or on an electronic information board built into the roof of the bus shelter and on the Internet.

At interchanges, clear and standardised directional signs should be set up to assist travellers transferring from one vehicle to another.

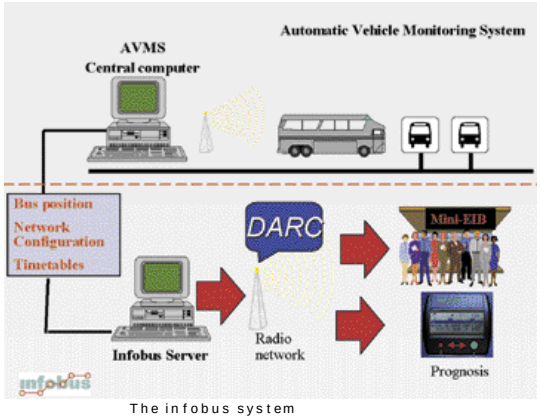
On buses, the route destination and number should be easy to read for people waiting at the stop. On-board, in addition to traditional static information, announcements or variable message displays should indicate the "next stop". Drivers can also play an important role in informing travellers.

The Gothenburg Traffic Information Centre - GoTic, presented by **Anders Kabjörn**, is an example of the combination of all these kinds of information. This R&D project in which scientific research and practical trials are conducted in association with researchers and suppliers involved in the sector is aimed at developing a system specially adapted for the Gothenburg area. It includes a traffic information centre, information at stops and on board, and SMS and wap real-time services on mobile phones.

For an integrated information system

The conference presented some of the most successful applications of passenger information. They covered all the channels listed above. The main lesson we can draw is that passenger information should constitute a comprehensive and integrated approach. In other words, it is not enough to provide detailed information on each bus or tram line to build an efficient passenger information system. It should be possible for passengers to plan and complete their journey from A to B in a seamless fashion. They need answers that are up-to-date, easy to understand, and at locations where they expect to find them, regardless of the mode or operator they use. Therefore, passenger information systems should be multi-modal and area-wide. They should offer door-to-door information integrating all transport modes (including the private car) available in the area concerned, via a single medium. That is what **Stig Franzen,** Arise-Francon, stressed in his presentation of a systems approach to information services, reminding us of the evolution of the information system in Gothenburg, which started with the KomFram communication platform in the 1980s and which is now covered by the GoTic project.

Stephan Schnittger, Karlsruhe University, for his part, made a presentation



The infobus system

Links are designed to obtain car travellers' origins-destinations and to generate alternative mode solutions

The INTERCEPT system

on the German approach of door-to-door travel information. The DELFI project was set up by the Federal Ministry of Transport in 1996 with the purpose of creating an integrated travel information service for the customer out of an apparently integrated information base: this led to the approach of connecting existing systems by means of communication technology. Thus, powerful interfaces now mean that optimal itineraries can be computed.

The TW2000 light rail in Hanover

From a more local point of view, the FuX (Fahrgastinformation und EXPO) integrated information system in Hanover is an innovative step forward in the technical, organisational and financial domains. Various transport companies using different technologies are developing a joint infrastructure for passenger information which they will subsequently be able to use and build on in a wide range of ways, in order to achieve a certain level of standardisation.

In parallel, the citycom mobil system on board the TW 2000 light rail vehicles specially operated for EXPO 2000 provides passengers with information and multimedia data on-line using DMB (digital multimedia broadcasting) technology. It is also an attractive medium for advertisers.

At the European level, various projects have the same purpose of providing a harmonised or standardised and ergonomic information system. The Infopolis project presented by **André Mériaux,** CETE Méditerrannée, was sponsored by the European Commission from 1997-2000. Its aim was to formulate some recommendations for an ergonomic presentation and content of multimodal public transport information. A web site has been developed for information and system designers in transport companies (see Public Transport International, 4/2000).

Another project for door-to-door information across Europe was presented by **Natascha Prigge**, DB Reise & Touristik AG. Eu-Spirit, partially funded by DG XIII of the European Commission under the 4th Framework Programme, integrates long-distance railway, local transport systems and travel-related, non-transport information (such as hotels) from 35 companies based in 7 countries. Similarly, INTERCEPT, presented by **Simon Hayes**, offers a common technical solution for linking public transport trip planners at the three main demonstration sites in Barcelona, Bremen and Bristol.

In this context, innovative technologies have made it possible to provide real-time information to travellers on new media such as Internet and mobile phones. Nevertheless, an optimum passenger information system should combine traditional means and innovative systems, according to the location, category of user and type of information.

A major concern: funding solutions

Developing an efficient information system comes at a price. In the changing environment of public transport, alternative sources of funding need to be found for improving the service. Public transport companies are aware of the challenges of passenger information but their financing priorities go to capital investment for rolling stock and renewing or upgrading the infrastructure. They have to develop new solutions for funding information provision. In this approach, making a business of travel information should be envisaged. It should make it possible to establish a self-financed activity that could also increase revenues by attracting more users to public transport. Thus, in the Netherlands, OVR was initially financially with government backing, but when the Ministry of Transport ceased its financial support, OVR had to charge for its services. The customer is prepared to pay for this useful service. Guillaume Uster, INRETS, explained the phylosophy in France concerning passenger information funding.

Jeremy Acklam, from Virgin Trains, also made a business case for the cost-effectiveness of providing digital information. He started by asking why companies decided to introduce an electronic service and admitted that the goal was to make the competitors think: "They're so much better than us, it's not fair!".

Conclusion

Given the wide range of possibilities regarding the need for and the advantages of well organised and harmonised passenger information systems, UITP intends to publish a letter which can be of interest for its members to convince public transport actors that passenger

information really is an important topic.

UITP would like to thank its local hosts for their hospitality and their warm welcome in Hanover and also all speakers for the high quality of their presentations.