EUROPEAN METROPOLITAN TRANSPORT AUTHORITIES SUITVE

People with disabilities, and generally speaking, people with reduced mobility encounter great difficulties to use public transport networks. Things have improved over the years in terms of barrier free designing in stations or at bus stops. More and more specific equipments such as magnetic loops, guide path for blind people, or lifts in stations, ramps on busses, vocal as well as written information, have been implemented. Yet some severely disabled people are still just unable to use public transport systems, and some will never be able to, however accessible mainstream services could become.

Thus severely disabled people rely on door-to-door services either for the whole trip or to get access to the PT network.

Over the years, these services have been developed in most countries. They generally encounter a big success among the disabled population, but the needs are increasing in term of quality as well as quantity and the public authorities are facing an increase of the costs and often a need for a better efficiency.

The Working Group of the association of European Metropolitan Transport Authorities (EMTA) dedicated on accessibility issues has decided to review the way these door-to-door services are organised in the European large urban areas. 13 Public Transport Authorities of cities or regions members of EMTA have answered a questionnaire on the door to door services in their area. The analysis that follows is based on these answers.

The cities / regions surveyed

The 13 territories surveyed are: Amsterdam (answers provided by Regionaal orgaan Amsterdam), Barcelona (Autoritat del Transport Metropolità), Berlin (Senate of Berlin), Bilbao (Consorcio de Transportes de Bizkaia), Brussels (Region of Brussels Capital), Dublin (Dublin transportation office), Genoa (Municipality), Göteborg (Västtrafik), London (Transport for London), Manchester (Greater Manchester Passenger Transport Executive), Paris and Ile-de-France (Syndicat des Transports d'Ile-de-France), and Stuttgart (Region Stuttgart).

These territories are very heterogeneous, in terms of administrative framework (some are cities, others are regions), of surface (890km² in Berlin vs 12,000km² in Ile-de-France), and of population (500,000 in Göteborg vs 11 million in Ile-de-France).

Organisation Isation

Specific door to door services exist in all the cities/regions surveyed. They have been available for a long period of time, around 15 to 20 years. The earliest ones were set up in Göteborg in 1967 and in Brussels in 1976. The most recent ones are already some years old (Dublin) or are the result of recent re-organization or existing services (Paris).

The reason for setting up these specific services was primarily the inadequacy of PT network to people with physical disabilities, and occasionally a law enforcement (Amsterdam, Ile de France).

Specific door-to-door transport services are usually organised and operated in co-operation with, but not within, the mainstream public transport networks (except in Brussels where services are integrated in local public transport operator STIB), bearing a specific name most of the time. They are often related to the social departments in the municipalities or linked to associations of disabled people (Bilbao, Berlin). Two interesting cases are Genoa with social co-operatives gathering Red Cross, Taxis and national associations for assistance, which are responsible for part of the services, and Dublin where five service providers run the services on a non for profit or voluntary groups basis in the metropolitan area.

Amsterdam, Genoa and London have a dual organisation with two different entities, based on the level of disability in Amsterdam and rather on the purpose of the trip in London.

Overall responsibility for the provision of the services falls most of the time under the City's/Region's tasks. In the territories where some co-ordination bodies bringing together different local authorities for transport issues exist, these are often responsible also for door-to-door transport services (as in Manchester with Greater Manchester Passenger Transport Executive, and Ile-de-France where STIF, the regional transport authority bringing together the government, the region and counties, is responsible for the regional scheme of door-to-door services). In Dublin each private provider is responsible for its services.

Services are organised and managed in various ways. Management and information to passengers can be in the hands of public authorities themselves (in Barcelona), of specific transport companies selected through tendering procedures (Greater Manchester, Paris), or of disseminated operators without general scheme (former system in Ile de France and current system in Dublin). Operation of services is usually a responsibility of companies linked with public authorities through contracts for a limited period of time.



Main characteristics of services

Area covered is usually the city and close outskirts (roughly the area under PTA's responsibility) and there is a maximum distance from the centre, usually 10 to 15km when PTA is a city and up to 50km when PTA is the region. Paris has no maximum distance but 99% of the trips are in a radius of 18km from city centre.

Door to door services are used for daily life purposes in the near neighbourhood. This is confirmed by the average length of the trips see below.

Persons entitled: the criteria to define entitled passengers vary greatly from severely handicapped (80% disability and above) to people having difficulties to use PT. As a consequence, the number of potential beneficiaries of these specific services varies from less than 1% of the whole population in some cities (2,000 entitled passengers in Barcelona, 1,300 in Genoa) to nearly 10% in others (Manchester).

Some cities require a medical certificate to award a card enabling to use the service (Barcelona). In Paris, a specific healthcare commission (COTOREP), which validates allowances for the disabled, issues a personal card showing the level of disability, and this card is necessary to be registered to use the service. In London, a review is under way to bring in a new definition of entitled passengers, so that the service really benefits the people who need door-to-door transport.

In Amsterdam two different services deal with different levels of disability, light and severe. The second service VZA has been set up on request of the disabled people themselves (probably because overbooking of the first one). It can be understood that if the criterion is the difficulty to use PT network, ageing people are also eligible, whether they are not if the criterion is only disability.

There is often a gap between the number of people entitled to use the service and the number of those using it (more than 70% of potential beneficiaries use the service in Genoa and Göteborg, but less than 40% in Berlin, London and Manchester). It could be interesting to know why there are so many "sleeping clients", and more precisely if these people occasionally use PT for some destinations and only door to door for others, which means that integration of door to door services with PT network should be enhanced and naturally accessibility of the PT network enhanced as well? In Dublin people are asked to be members of the asso-

Reservation procedures. Trips must be booked ahead of time everywhere. The use of a specific electronic software for bookings shortens procedures and optimises itineraries (Taxitronix in Amsterdam, Computercab in London, TITUS in Paris, Greater Manchester also has a specific software).

ciations that run the services.

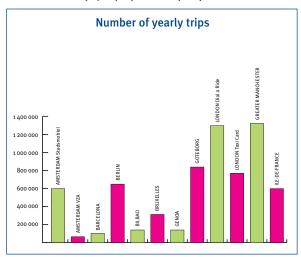
Number of trips is linked to the criteria of entitlement. The highest number of trips among the cities surveyed is reached in London and Manchester (1.3 million trips in 2002), where more than 50,000 people are indeed registered to use "Dial a Ride" (London) and "Ring and Ride" (Manchester).

In Amsterdam, the Stadsmobiel service, which takes care of lightly disabled people, carries 600,000 passengers per year, whereas VZA, which was devised for more severely disabled people, carries 65,000 passengers (for 1,500 users).

The number of trips on the total population of the territory concerned highlights the different situations

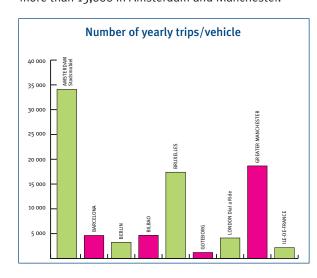
in the cities: 1.75 trips per inhabitant in Göteborg vs 0.53 in Manchester and 0.05 in Ile-de-France. This could probably mean a high potential of development of these services in some cities.

The ratio "number of trips/number of users" gives an average number of trips/year/passenger entitled. Barcelona and Genoa rank first with more than 100 trips per user every year, which can seem a relatively low figure, highlighting once again the need to investigate the difference between "active" and "sleeping" customers (are these people potential PT network users provided a better information?, are they drivers of their own adapted car when not using door to door services?...). At the other end of the scale, Ile-de-France has only 4 trips per user per year.



Number and type of vehicles used. The number of vehicles used for the service varies greatly between cities, reflecting the size of the population served and the number of entitled people (from 10 vans in Dublin to more than 200 in Berlin and Ile-de-France). Most cities use small vans with up to 8 seats or a combination of 6 seats and one wheelchair or 4 seats and 2 wheelchairs. It should be noticed that some cities choose to promote transport of people with reduced mobility by taxi rather than by specific vehicles. It is the case in London, where 4,000 taxis are accessible to Taxicard holders.

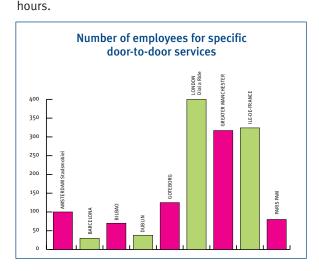
It can be noticed that the yearly number of trips per vehicle is very different between the cities, highlighting different policies (optimisation of trips so as to fill vehicles in some cases vs individual trips in others), and maybe differences in efficiency as well: less than 3,000 trips per vehicle per year in Ile-de-France and more than 15,000 in Amsterdam and Manchester.



Given that vehicles are usually small vans of 8 seats plus driver, the services require a high number of drivers. As the need for trips is increasing, the number of drivers is likely to increase as well. It seems that the job has not been registered as a "specific job" although it requires a specific training, and some skills. A common European position on this subject could be useful. The workforce varies a lot between cities, from 30 in Barcelona to several hundreds in other cities, like in Paris-Ile de France (more than 300). These services usually include a team for booking of trips (30)

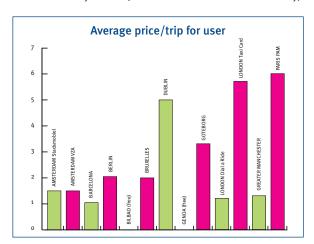
Number of employees working for the service.

employees in Berlin), and drivers of vehicles. The ratio of number of employees per vehicle amounts to less than one in some cities (Paris) up to nearly 5 in Amsterdam and Manchester. The ratio of trips per employee of the service per year amounts to less than 2,000 in Ile-de-France, but to more than 4,000 in Amsterdam and Manchester, perhaps highlighting various levels of efficiency in the operation of these services or differences in the regulations of working



Average length of trips. Although services may operate on longer distances (see area covered), average distances are short, between 3 and 10km, with exception of Ile de France where average length is 12km. Two cities mentioned the duration of trips in minutes: Göteborg (18mn) and Paris (35 to 40mn, for an average distance of 7km).

Average price. Fare policies seem to vary a lot between the cities. Trips are free in Bilbao and Genoa. In Barcelona, fares for door-to-door transport services are the same as those for mainstream public transport. In some cities, price depends on length of trips, and concessionary fares (linked to income and disability)



and monthly prices are common. Ile-de-France and Paris are the more expensive services for the users (6€ inside Paris whatever the length of trip)*.

The fare policy depends on the amount of funding provided by public entities.

Cost of investment. It seems that services grew little by little over the years and investment for the launching of the service has therefore not been a major concern (other than the fleet itself).

Things are changing with the need for software to help booking and running the services. Amsterdam, Greater Manchester, London (taxicard) and Paris are equipped with apparently different software.

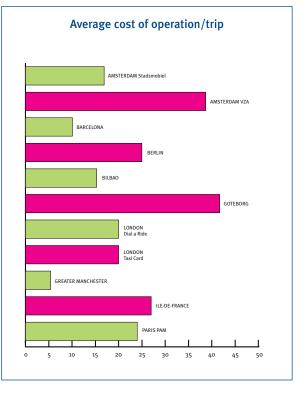
These software are rather new on the market, for this field of activity and thus very expensive. A common research in this field would probably prove profitable to EMTA members.

Running costs. Total running costs vary, but amount everywhere to million Euros, meaning they have a real impact on public budgets.

When considering the yearly cost, it is interesting to see when available the percentage of funding by public entities (state, local government, healthcare institutions, even department of Enterprise trade and employment in Dublin...) related to the total cost of the services (the average price per trip and the number of trips give the amount of revenues from the service).

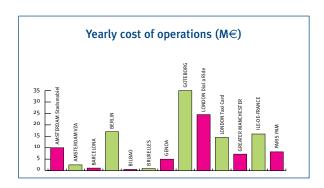
The ratio is very high in Berlin 88% approximately, also in Greater Manchester 82% and even higher in Barcelona almost 100%. The lowest is Ile de France with a funding/ yearly cost ratio of 65%. The ratio in Paris is 75% approximately.

The average cost of operation per trip can be split into 3 groups. In the cheapest group (Barcelona, Greater Manchester and Dublin) cost amounts to between 5€ and 10€ per trip; in the second group (Bilbao, Genoa, London, Amsterdam Stadsmobiel):



* It is worth noting that in France a new law on "equal opportunities for the disabled" presently under parliamentary discussion reinforce the right of transportation for the disabled, urging PT to be fully accessible in a short period of time (less than 10 years) or providing alternative modes (door to door for ex) at a comparable price.

between $14 \in$ and $20 \in$. In the third group, above $20 \in$, we find Berlin ($21 \in$ or $28 \in$ according to the size of the van), Paris ($24 \in$), Ile de France ($27 \in$), Amsterdam VZA ($39 \in$) and Göteborg ($42 \in$). A better knowledge of the details of the service provided could probably explain those differences, which also certainly have to do with the level of salaries in each country. Bilbao mentions a cost per trip of $15,3 \in$ and a cost per user of $3,6 \in$, meaning that in most cases several passengers travel together. This accounts for efficiency.



Quality of service, Ction passenger satisfaction

Passenger satisfaction is measured in London, Manchester and Dublin, and will be in Paris after a year of operation. Genoa is also carrying a survey on its system.

In other cities, passenger satisfaction is assumed high in relation to the increase of the demand from users.

Foreseen improvements nents

Almost all cities/regions feel the need for improvements whether in terms of expanding the services, or reviewing better the needs of the users and the responses to give. There is also a strong concern for software as a help to run and manage the overall service.

The answers to the questionnaire proved to be very rich and should lead the group to carry out further analyses.

All cities/regions have felt the need for an alternative provision of transport for the people with reduced mobility to regular Public Transport.

The Public transport Authority isn't generally speaking responsible for the specific door-to-door services, which are thus organised in various ways; tendering procedures aren't common.

Door to door services are mostly seen by the people with reduced mobility as the very mean to travel for daily purposes or necessity. Most trips length are under 10km.

The criterion for entitlement is definitely the key element for the organization (size and type of fleet), the overall costs and the attendance to the services. A further research on the "sleeping customers" could lead to interesting conclusions as to the potential use of Public Transport and the policy of integrating door to door services and PT from an operational point of view.

From a qualitative point of view, the questionnaire lacks details about the service itself whether it is curb to curb or private door to private door. They could explain differences in costs. With no doubt specific software is a help to reduce delays in booking, but the costs are sometimes out of reach.

The weight of the annual cost of the services is heavy everywhere and the figure is increasing. The trend of increase in number of ageing people in Europe calls for the need to study a better integration of fully accessible Public Transport and door to door services and possibly some intermediate services in between the two (on demand transport, flexible routes or...)

with the objective of a better global efficiency of sustainable transport and social inclusion. The possibility for taxis to play an active role in this field is also worth noticing.

The price for the customer depends on local policy towards the disabled. Generally speaking it is close to Public Transport fares and the ratio revenue fares/yearly cost is under 10%. Where the ratio is higher, the policy might change under future law prescriptions.

Finally some points should be emphasised:

The definition of people entitled is the key element to build the service in terms of quality of service and in terms of financing the services. Who should be entitled and how does the service control eligibility? In case of criteria more strict than in the past what to do with previous users?

Quality of service in door to door services could be defined, assessed and measured like in scheduled PT network at a European level; This would lead also to qualification of the drivers (new job that has to be formally registered) at a European level.

New tools or new organisation for better efficiency. The question of the software deserves a study (a benchmark possibly). A better integration with PT network could be searched. Also it could appear by studying better the needs of the so called "people with reduced mobility" that a variety of services (ranging from door to door to on demand) could be provided and the proper means selected (for example people with light disability don't need adapted vans with lifts, some disabled people could use PT provided that the door to door service would bring them from their home to the station that is 500m apart etc...).

