



European Metropolitan Transport Authorities

## Survey about accessibility of heavy rail services

### Background

People with disabilities and generally speaking people with reduced mobility (PRM) encounter great difficulties using public transport and in particular the rail services. Things have improved over the years, but difficulties remain and some particular aspects deserve to be highlighted.

EMTA (European Metropolitan Transport Authorities) launched a Working Group on accessibility issues several years ago with the objective of observing and exchanging good practice, review progress made and draw recommendations.

Several studies have been already published namely: Study on travel information for people with reduced mobility (2003), Study on Door to Door services (2005), Study on Older people and Public Transport (2007) and a Charter of commitment to accessibility of the transport systems (2003).

The present survey aims at exploring Accessibility to Heavy Rail Services, taking from the examples of EMTA network. The study bears a qualitative aspect rather than a quantitative one due to the size of the sample, it mainly shows trends.



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The technical challenges of "access to all" remains far more complex in the rail service system than the bus system. Whereas the uptake of accessible buses is now common across European cities, the rail system isn't as advanced. This is partly due to the fact that buses nowadays in the cities have a life-time of 10-12 years whereas trains have a lifetime of 30-40 years.

The aim of the survey was to understand the current trends and developments regarding accessibility for people with reduced mobility in suburban heavy rail transport. The objective in particular was to identify if there are possible standardisations for European countries by reviewing the different solutions. The questions were designed by the EMTA working group in order to find out about the current developments and standards and aspirations to improve access to the heavy rail network for people with reduced mobility within the different European cities/regions.

The answers mainly from European transport authorities with the exception of Montreal Canada, were analysed by the working group. With regard to its results, the survey aimed not at setting a benchmark but rather at gaining an understanding of the individual local solutions in the different places in relation to national and/or European regulations. The questionnaire was sent out to the EMTA members on April 2010, 15 responses from the Transport Authorities of the following metropolitan areas have been collected:

Barcelona ATM, Birmingham CENTRO, Budapest (MAV), Berlin-Brandenburg VBB, Copenhagen MOVIA, Frankfurt RMV, Ile de France STIF, Helsinki HSL, Madrid CRTM, Manchester TfGM, Montreal AMT, Turin AMMT, Trafikverket for Sweden, Vilnius MESP, Warsaw ZTM.

Information on the detailed questionnaire can be reached at **contact@emta.com**. This summary will present the main findings of the survey and recommendations about the next steps that could be taken.

# **1** - Legislative framework and policy recommendations in use across Europe

The results of the survey across European cities/regions and the Canadian city of Montreal show that when implementing accessible-to-all services on the suburban rail networks, reference is made to existing regulation. However there is quite a variety of sources. Most of the time reference is made to national law. Whether a "generic" law based on equal rights for example, which is the case of Spain, France, Germany, the United Kingdom and also Canada or additional specific national regulations on transport and/or on building and construction, France and the United Kingdom refer to both.



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Those countries that do not explicitly refer to national legislation base their accessibility policy on the European legislation and namely they rely on the Technical Specification of Interoperability (TSI) relating to "Persons with reduced mobility (PRM) in the Trans-European conventional and high speed rail system"<sup>1</sup>. Northern countries and Poland are in this case. It is worth noting that two countries made also reference to the recent regulation (EC) 1371/2007 "on passenger rights on rail services"<sup>2</sup>. It is also worth adding that half of the Transport Authorities who responded mentioned the involvement of representatives from the disabled persons in the consultation process prior to deciding on measures. In Denmark, France and Spain such groups enjoy an official counselling role at the local Transport Authority.

**Besides the legal texts, specific technical recommendation guidelines** are also a wide spread practice. Most Transport Authorities enquired did mention the existence of such guiding principles<sup>3</sup>. Among those, the TSI enjoys a special place. In fact the TSI regulation is seen as an umbrella legislation that provide technical details. Whereas TSI is used in Sweden extensively on the rail system with the exception of subways (metros), in other places TSI is seen as very relevant when in specific circumstances the national legislation is particularly difficult to apply or too costly (this happened in France).

The TSI regulation offers good minimum standards to the Transport Authorities and the operators. The TSI however, has its own limits.

The TSI was meant at first for the TEN-T network and somehow "naturally" extended to regional/suburban railways. The particular case of refurbishment works has yet to be clarified, what are the obligations? The second point is that both technology and user needs are evolving fast. Therefore a question arises, is the TSI really **adapted to the present needs?** In particular the size itself of assisting devices or the growing use of ITS should be considered.

From the point of view of the traveller, the advantage of the taking up of the TSI would be having comparable standards across European rail transport systems. It would ensure there are minimum accessibility standards applied on the different rail systems so that a **disabled traveller is aware of the accessibility situation he/she will face when travelling on the local network, but also on a distant network he/she plans to visit.** This continuity is of major importance for a disabled traveller. *We will come back to this point further in the text.* 

This brings us to another major aspect concerning the European regulation: the **communication** towards disabled passengers on these standard requirements of the TSI should be improved in order to give them more confidence in travelling on the networks.

While a general awareness is undisputable, there is a diversity of references. Pragmatism has lead some countries to base their rather recent policies on the European rules namely the TSI regulation or the regulation on passenger rights (EC)1371/2007. But is TSI enough to meet the standards of today for the disabled passenger to reasonably expect from rail network services?

EMTA thinks there is a need to pursue the efforts of standardisation of the TSI and also to enhance communication on the results. Research could be enhanced at European Commission (EC) level and collaboration with disabled representatives such as the European disability forum (EDF) platform is important.

(EC) 1371/2007 "on passenger rights on rail services" (chap 5 art 21).

<sup>&</sup>lt;sup>1</sup>/<sub>2</sub> Technical Specification of Interoperability TSI relating to "Persons with reduced mobility (PRM) in the trans-European conventional and high speed rail system" (Decision EC 164/2008).

Among the most interesting and comprehensive example using the TSI-PRM is the "code of practice" issued by the department of transport for Scotland where practice refers to national and EU regulation altogether. ITS Intelligent transport systems.



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Using rail services means for the traveller getting to the station then boarding the train. The survey overviews these two steps in the following paragraphs. Equally important is the preparation of the journey. That will come afterwards in the report.



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### **2** - Accessing the platform and the vehicle

#### Methods of accessing platforms at railway stations

This part of the survey explored the accessibility of stations referring to the infrastructure, the buildings and doorways at stations. Smaller and larger stations were separated in order to get a better picture of the rural versus the urban situation.

The results show that 80% of larger stations are equipped with elevators, or elevators and ramps combined. In smaller stations, ramps are still in use in half the cases. One reason for that is the facility lay-out is less complex and of lesser height, a second reason is that investment to install lifts was probably directed first to larger station on the basis of these serving a greater number of passengers.

There is evidence across the cities/regions surveyed that progress have been made to achieve a user-friendly access to the station facilities. In some cases the extensive use of lifts even becomes a new technical challenge. Barcelona Transport Authority (ATM) relates that after an internal survey on the use of lifts in rail stations, it appeared that lifts are used so frequently that the wear and tear is accelerated compared to what was originally anticipated when first installed. ATM sees this as a message for the future when the older people's share of the population grows.



#### About boarding devices

To achieve level access from platform to train, in particular for wheel-chair using passengers, the approach must be systemic, taking into account the interface between the level of the platform and the vehicle floor height. Now even within countries there are variations within platform heights in relation to the interface between platforms and vehicles.

To further complicate matters there seems to be no single standard solution to address the variation in relation to the boarding interface between platform and vehicle. Although the rail staff are available to help at larger stations, staff assistance is more problematic at unstaffed rural stations. The survey revealed that boarding is addressed at smaller stations via vehicle based or platform based portable ramps operated by staff on trains.

We found also that it is common that platform heights and vehicle design aren't under the same authority's responsibility, which makes the case even more complex to solve.

In Germany for example, the Landers are responsible for the platform heights and this puts the onus on Transport Authority to address the design and technical requirements for the new rolling stock to ensure level access in relation to the boarding interface between platform and vehicle.

We learnt form the answers that there is no one single solution and that both vehicle based and platform based boarding aids are equally important (and sometimes the combination of both). Efforts must be kept on both parts to bring about solutions for level access. Furthermore the reliability of the vehicle-based device being still unsatisfactory the systemic approach is furthermore important. Due to liberalisation supported by EC Regulation<sup>5</sup>, rail services are progressively tendered out. The **tendering specifications must be specific and detailed with regard to accessibility to PRMs** in order to ensure progress in accessibility and in any case to avoid a regression of accessibility quality.

EMTA thinks it is crucial that both aspects of the systemic approach continue to be simultaneously explored and improved. Furthermore, because of tendering process on rail services there is a real need for the Transport Authorities to be very specific in the franchise tendering documents that the new operator will be proactive in ensuring the best level of accessibility, and at least maintain the same level as in the previous franchise.

**The survey enquired also the special services** offered to enter/exit the station and to board the train.



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The question aimed at finding out examples of best practice of rail service staff in helping the disabled passengers through personal assistance or training. It appears that the practice is well spread, 60% of the rail services enquired offer assistance to the passenger to enter the station, whether upon reservation or not. And in nearly all cities/regions, service helping to board the train is offered, independently from the level of difficulty to board the train.

Besides there are examples of *accompanying* service dedicated to accompany the passenger during the whole trip. These services are less common but much appreciated where they exist. One example is "Les compagnons du voyage" (fellow to travel with) in France. However these are complementary services not always provided by the rail operator, they are seen typically as inspiring good practice that can address all types of disability.



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The high level of positive answers on helping services prompts EMTA to recommend the implementation of this form of support services to help address all types of disability regardless of the level of accessibility of the station facility.



## **3** - Travel information and journey planning

An important part of the survey was dedicated to the planning and preparation of the journey: where to get the information and how to buy a ticket?

## Information about accessibility of the transport networks

The idea was to get an overview on how the impaired customer finds the relevant information to prepare a trip. How to gather information about accessibility of the transport chain, where to purchase tickets and what about possible restrictions for a wheelchair user on the rail system?



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At first, the responses evidenced the fact that due to the deregulation of the market and the variety of actors at local, regional and national level, a comprehensive national travel

<sup>&</sup>lt;sup>5</sup> See (EC) 1370/2007 "On public passengers transport services by rail ad by road".

information approach concerning special needs isn't achieved and still fairly complex to organise with the exception of the UK where the National Rail Enquiries website details access features and whether a station is staffed<sup>6</sup>.



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Information on accessibility varies in quality, it tends to be mostly regional - thanks to the Transport Authorities - or operator based. The survey revealed that when such information is available it is often not easy to find.

From the point of view of a passenger doing research on rail travel abroad using a travel planner on the internet, it is not possible to understand exactly the meaning of the accessibility information given on a foreign transport network website, and it is often poorly updated.



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Some basics tips such as giving the information in English language in every European country, and using the international acknowledged symbol of accessibility would be a very first step to let people know they have reach the right place on the website for information on access facilities for disabled people.

The second point is that according to the survey, there is no real time information for disabled passengers, such as a platform change at the last moment, or the special coach for boarding that has been displaced from its normal location (with the exception of Paris IIe de France currently undergoing an experiment on availability of station lifts for a targeted group of disabled passengers). This is extremely useful information to disabled rail users and should be provided because it is precisely the extra information that would generate more confidence in travelling for the disabled passenger.

EMTA thinks efforts should be made with regard to travel information directed to people with all forms of disability with two strong priorities for the ITS application:

- firstly, harmonise the internet presentation of the specific information related to disabled people so that a traveller can get a clear idea of the accessibility situations he/she will face in the course of the journey and have a consistent level of information in order to plan a journey across different countries in Europe.

- secondly, real time information with relevant details to accommodate a disabled traveller should be offered online, at the station and through mobile devices.

Interestingly, disabled passengers of the Berlin-Brandenburg transport network expressed preference for getting the proper information from the local Transport Authority rather than from the social networks (such as Facebook or Twitter) that are fast developing.

#### How to buy a ticket

Due to the very different tariff policies across Europe ranging from full rate to free ride, the question wasn't relevant in every place surveyed. However the trends show that the majority of rail service networks offer more than one way to purchase a ticket. Generally speaking though, ticket offices are clearly giving way to the ticket vending machines, which has an impact on disabled or older people. A careful "universal design" of such machines is crucial and again attending staff in the close area would give more confidence notably to the oldest rail-using customers.

The survey showed also that electronic purchase through mobile phone is increasingly popular. Again, selling ticket by SMS should have the same process across the EU to support passengers to understand this more easily. Variations of national approaches to SMS ticketing occur within the same country in many cases.

EMTA therefore would encourage harmonisation in SMS-selling-tickets-applications across European transport networks.

<sup>&</sup>lt;sup>6</sup> http://www.nationalrail.co.uk/stations\_destinations/

Thanks to the progress made to accommodate the needs of disabled passengers, more wheelchair users are travelling on the rail networks. Moreover, **electric powered wheel chairs are commonly used now.** The survey enquired if there were any kind of limits posed by the transport networks to the size, weight or particular features of this type of assistive devices. In other words, can a wheelchair using passenger be sure the features of their wheelchair fit on all different rail systems across Europe?

The survey revealed that 73% of the surveyed rail services refered to the TSI specifications of a standard manual or standard electric powered wheelchair as the norm<sup>7</sup>.



Copyright: ATM Barcelone

This point is of vital importance for all platforms, lifts, doorways etc... that are built take into account the above standards. This allows the operators to guarantee the safety of the wheelchair using passenger as long as their assistive device features are in line with the TSI specifications. But should the features and dimensions of the electric wheelchair change significantly, the safety of the wheel chair user as well as the safety of other fellow passengers could be at threat.

The survey also noted that mobility scooters are getting more and more popular, notably among older people, especially in Sweden and the UK. The rise in popularity of this form of mobility aid poses very different challenges with regards to carriage on rail networks as the dimensions and operation of these vary greatly from wheelchairs.



### 4 - Research and evaluation

The final part of the survey enquired about possible research and overall evaluation made.

Different demonstration projects were mentioned (the Blue-eyes project from RATP or the specific automatic SMS information on lift availability at STIF lle de France) but no current research to improve access to EU rail networks for disabled people was identified. Transport Authorities remain concerned about improving access for everyone, especially on the rail networks. It is generally recognised that improvements often need at least mid-term planning, yet the current economic downturn doesn't allow a clear view as to the best way to achieve this and can lead to budget tensions in terms of how best to prioritise access related improvements.

"Although much progress has been made in terms of helping disabled people travel using the rail network, the true effectiveness of solutions has never been evaluated. The survey revealed that it would be useful to consider a review of different EU Member State approaches in terms of how rail networks meet the needs of people with a range of impairments".

Nevertheless EMTA thinks applied research bringing up new insights and the larger use of technology would be of benefit to the accessibility policy of the transport networks.



**To conclude,** the survey clearly showed that awareness of disabled passengers needs is widespread on the rail-service networks across Europe and significant progress has been made that EMTA intends to continue to monitor in the coming years. This report is therefore seen as a first step of the monitoring process.

The recourse to TSI regulation is a good start for harmonization but provisions of the regulation should be updated to take into account evolution of passenger needs and of technology.

However some technical problems are still there which need to be addressed, and the economic downturn has certainly slowed the pace of delivering the planned measures. Besides the opening of the rail transport market to competition will force the Transport Authorities to be very thorough in the franchise tendering specifications so as to ensure accessibility isn't downgraded.

The use of new technology, especially related to ITS should be not only encouraged but accelerated notably in the field of information to disabled travellers, bearing in mind that getting confidence in the transport system is even more important to disabled passengers than to any other passenger.

Further research and demonstration projects must be encouraged as well and would inevitably require the support of the European Commission to carry this forward.

7 2008/164/EC PRM TSI in Trans European conventional and high speed rail systems-Section 4 – figures 5 & 6 http://eur-lex.europa.eu/LexUriServ/LexUriServ/LexUriServ/LexUriServ.do?uri=0):L:2008:064:0072:0207:EN:PDF.



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