



The carriage of mobility scooters on public transport

April 2013

Research Institute for Consumer Affairs



About Rica

Research Institute for Consumer Affairs (Rica) is a national consumer research organisation that focuses on work with older and disabled people. Originally founded by Which? it is now an independent charity.

Rica works with manufacturers, service providers, regulators and policy makers, using research to increase awareness of the needs of disabled and older consumers and to improve products and services. Under the trading name of Ricability the organisation also researches and publishes practical consumer reports.

Rica has published an extensive range of research reports and consumer guides relating to mobility issues for older and disabled consumers including work on motoring, taxi accessibility, powered wheelchairs and scooters, as well as travel by public transport.

This report was researched and written by Caroline Jacobs, Cassie Barton and Mark Harnett.

For further information about Rica research see www.rica.org.uk or telephone 020 7427 2460.



TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	5
	Summary of Recommendations	5
2.0	INTRODUCTION.....	8
	The Brief.....	9
	The Legal Background	10
3.0	MOBILITY SCOOTERS ON BUSES	11
	Introduction	11
	Confederation of Passenger Transport (CPT) Code for Mobility Scooters	11
	Transport for London Mobility Aid Recognition Scheme	13
	Progress on implementation by bus operators.....	14
	Scooter models that meet the CPT code requirements	19
	Publication & promotion to consumers.....	20
	Recommendations	22
4.0	MOBILITY SCOOTERS ON TRAINS	24
	Introduction	24
	Research methodology	24
	Overall Summary of TOCs policies	24
	Individual TOC Mobility Scooter policies in detail.....	28
	What is happening in practice?	36
	Mobility scooters that fit the TOCs’ policies	39
5.0	MOBILITY SCOOTERS ON TRAMS.....	42
	Introduction	42
	Overall summary	42
	Individual tram policies	42
	Recommendations	48
7.0	SCOOTER LABELLING, KITE MARKING AND PRODUCT INFORMATION.....	53
	Introduction	53
	Summary of findings	54
	The BSI Kitemark and other accreditation logos	56
	Additional consultation feedback.....	57
8.0	ADDITIONAL RESEARCH.....	59
	Market research & analysis	59
	Collection of scooter product data.....	59
	Consumer research.....	60



Safety research	60
Monitoring of policies and practice by operators	61
9.0 APPENDICES	62
Appendix 1: Scooter models that meet the CPT code requirements	62
Appendix 2: Scooter models within reference wheelchair dimensions.....	64
Appendix 3: People and organisations consulted	70

1.0 EXECUTIVE SUMMARY

This report has been prepared by the consumer research organisation Research Institute for Consumer Affairs (Rica). It documents the findings of research commissioned by the Department for Transport and carried out by Rica to investigate policies, practices and concerns relating to the carriage of mobility scooters on public transport, including buses, trams and trains. The study included research to identify individual models of mobility scooters currently on the market that meet the specification criteria for carriage, where individual operators allow this.

Finally, the report makes recommendations for actions that it is believed could mitigate a number of current issues and assist both consumers and industry by enabling easier and safer access to the public transport network for mobility scooter users.

The recommendations expressed in the report are those of Rica and do not necessarily represent those of the Department for Transport.

Summary of Recommendations

Our analysis of current policies and consultation with industry and users indicate that the actions outlined below could help to ensure that existing policies and practices for carriage of mobility scooters are successfully implemented and that, where carriage is possible, it is safer and easier. The option of kitemarking scooters was also investigated. However, kitemarking does not take into account the capability of the scooter user (often a condition of carriage) and would be difficult to implement given the range of different policies held by transport operators. For these reasons, it was found not to be the most effective option.

Provision and promotion of accurate data on mobility scooters

- Verified data should continue to be collected that identifies scooter models that meet the reference wheelchair space dimension (1200mm x 700mm) and that identifies Class 2 scooter models that meet the required dimension and specification for bus carriage set by the CPT Code (i.e. 1000mm x 600mm). Data should include details of scooter weight, turning radius and gradient capability. This data has been collected by Rica as part of this study (Appendix 1 & 2), but ongoing research and update is required to keep up with the market.
- This data should be accessible free online and made available to non-internet users and be widely promoted – including to consumers, bus, train and tram operating companies, scooter retailers and consumer/voluntary organisations and advisors at a local and national level.

Consumer Information

- Additional and continuing publicity is needed to increase awareness of existing bus, tram and train scooter policies and permit schemes.
- Promotion needs to be both national and local. Local promotion should include local authorities, consumer/voluntary organisations and local scooter/aids and equipment retailers, and Shopmobility schemes.
- Publicity about schemes should always provide clear information on the two aspects of criteria for carriage – i.e. scooter specification *and* ability to safely manoeuvre.
- Scooter manufacturers, retailers and Motability should provide product information that clearly shows the models that meet the required dimension and specification for bus carriage set by the CPT Code.

Train Travel - Safety Research

- User and technical research by the Rail Safety and Standards Board and TOCs to provide additional guidance to scooter users and operator staff on safely boarding and travelling on trains. This should include research relating to manoeuvring a scooter onto and off a ramp, positioning correctly during travel and stability issues including additional loading of shopping and luggage.
- Research should be carried out to assess the costs, benefits and viability of changing platform heights or boarding practices to better address the needs of scooter users.

Monitoring - Activity and Customer Experience

- All bus companies should monitor the introduction and take up of scooter permit schemes, as well as any related complaint or accident data. This should include numbers of permits issued and refused. Central collation of this data should be considered by the CPT to provide details of wider coverage and take up.
- All train operating companies (TOCs) should collect and monitor scooter carriage on trains. This should include data on permits applied for and issued, number and detail of pre-booked journeys, as well as any related complaint or accident data. Data should be centrally collated by ATOC to provide detail of activity throughout the rail network.
- All tram operating companies should collect and monitor scooter carriage on trams. This should include data on permits applied for and issued, as well as any related complaint or safety data. Central collation of this data should be considered by the CPT / UK Tram to provide details of wider coverage and take up.
- Feedback on scooter use should be collected by all transport operators through consumer research/feedback techniques such as mystery shopping, journey shadowing and customer surveys.

Bus Travel – Adoption of CPT Code

- Bus operators that are not currently signed up to the CPT scooter code should be encouraged to do so. The code and permit scheme has the advantage of providing

clarity about exactly which scooters are allowable and enables operators to ensure consumers can safely manage their scooter. It also provides certainty to consumers.

Train Travel - Provision of Permit Schemes & Joint Working

- TOCs that are not currently operating mobility scooter permit schemes should consider doing so. Permit schemes have the advantage of providing clarity about exactly which scooters are allowable and enable TOCs to ensure that consumers can safely manage their scooter. They also provide certainty to consumers.
- If their scooter fits criteria for carriage, consumers should be provided with an opportunity to practice manoeuvring on and off a ramp of the required gradient and into a carriage. Advice should be provided on how to manoeuvre safely and travel. TOCs should be encouraged to deliver 'try a train' scooter days.
- The PTEG (Passenger Transport Executives Group) and regional PTEs should co-ordinate delivery of training/assessment opportunities across the different transport providers.
- Where TOCs accept carriage of scooters, they should publish details of other TOCs that accept scooters where their services connect, including key interchange stations e.g. York, Manchester Piccadilly, Birmingham New Street, etc
- Where possible introduce a joined up approach across TOCs i.e. companies should agree to accept scooter permits for travel from TOCs with similar criteria for carriage.

Tram travel - Sharing Good Practice and Research Data

- Tram operators should seek where possible to share research and monitoring data on the implementation of scooter policies and permit schemes through the CPT / UK Tram industry trade bodies. Although each network has some unique features, there are commonalities in overall tram design standards and customer journey experience.

Clarify Legislation

- The Department should provide clarity on the legality of a mobility scooter occupying the wheelchair space of trains, trams and buses, including if the passenger then gets off the scooter and moves to a seat. The majority of TOCs (and bus and tram providers) are taking the view that a scooter is 'equivalent' to a powered wheelchair, but this is not clear under current legislation.

Additional Research

Significant gaps in knowledge have been identified by this study. In summary, additional research and robust data is urgently needed to inform transport legislation, as well as operator policies, including:

- Market analysis – size, growth, nature of the mobility scooter market
- Ongoing collection of product data - to inform operators and consumers

Carriage of mobility scooters on public transport – research findings

- Consumer research - to better understand user profiles, needs and experiences
- Safety research – particularly on stability and manoeuvrability
- Monitoring of operator policies & practices – to provide up to date data on activity.

2.0 INTRODUCTION

The Brief

The research undertaken included distinct work packages with the following objectives:

Mobility scooters on low floor buses

Objectives

1. Identify models of mobility scooters that meet the new Confederation of Passenger Transport (CPT) code of practice for mobility scooters, drawing on existing scooter databases
2. Publish and promote this information to consumers and retailers through existing consumer websites, publications and exhibitions
3. Investigate with scooter suppliers, providers and retailers, as well as consumers, the feasibility and practical steps needed to introduce labelling/kite marking.

Scooters on trains - mapping & consultation

Objectives

1. Identify train operating companies (TOCs) policies and guidelines for carrying scooters together with any consumer guidance, training and permit schemes
2. Identify which mobility scooters meet these guidelines in terms of allowable dimensions
3. Identify the similarities and differences between the CPT code for mobility scooter travel and the various TOC guidelines and schemes and investigate the feasibility of TOCs taking a joint approach.

Scooters on trams - mapping & consultation

Objectives

1. Identify what policies and guidelines are in place for carrying scooters on trams, including details of any consumer guidance, or permit schemes in operation as well as any current operator issues or concerns.

Identify additional safety research required on scooter train travel

Objectives

1. Following consultation with the Association of Train Operating Companies (ATOC) and the various TOCs, prepare a research ideas submission to the Rail Safety and Standards Board (RSSB) following their set procedures.

The Legal Background

Mobility vehicle categorisation

Vehicles used by people with mobility impairments are categorised within the *Use of Invalid Carriages on Highways Regulations 1988*. The categories are based on the intended use of the vehicle and are as follows:

- Class 1 – manual wheelchairs
- Class 2 – powered wheelchairs and scooters with a maximum speed of 4mph, intended for use on footpaths and pavements
- Class 3 – powered wheelchairs and mobility scooters with a maximum speed of 8mph, intended for use on the road.

Buses

Accessibility on local and scheduled bus services is governed by the *Public Service Vehicles Accessibility Regulations 2000 (PSVAR)*. All new buses brought into service since December 2000 have had to meet these regulations, and older buses will have to be compliant by 2015, 2016 or 2017 (depending on the bus type). The regulations state that buses must be able to accommodate a “reference wheelchair” of 1200mm by 700mm. This means that all buses must have a wheelchair space of at least this size and ramp or lift access.

The regulations do not mention mobility scooters specifically, or give a definition of the types of vehicle included in the term “wheelchair”.

Light and heavy rail

Accessibility on rail is governed by two sets of legislation – the British standard is set out in the *Rail Vehicle Accessibility Regulations (RVAR)* and the European standard in the *Technical Specification for Interoperability for Persons with Reduced Mobility (PRM TSI)*. All trains used on the interoperable rail system (i.e. all the major lines of Network Rail) are governed by the PRM TSI, and because of this have been removed from the scope of the RVAR.

The PRM TSI specifies that trains must provide space to accommodate a “reference wheelchair” with dimensions of 1200mm by 700mm.

Light rail vehicles, including those used on tram systems, are still governed by RVAR. RVAR specifies the number of wheelchair spaces different trains must have, and requires that they accommodate a “reference wheelchair” of 1200mm by 700mm. The law requires all rail vehicles to be accessible by 1 January 2020.

Neither the PRM TSI or the RVAR mentions mobility scooters, or gives a definition of the types of vehicle included in the term “wheelchair”.

3.0 MOBILITY SCOOTERS ON BUSES

Introduction

This section includes information on:

- The Confederation of Passenger Transport (CPT) Mobility Scooter Code
- Transport for London (TfL) Mobility Aid Recognition Scheme
- Progress on implementation by operators
- Consumer consultation

Confederation of Passenger Transport (CPT) Code for Mobility Scooters

In September 2011 the Confederation of Passenger Transport (CPT) launched a code of practice for the use and acceptance of mobility scooters on low floor buses.

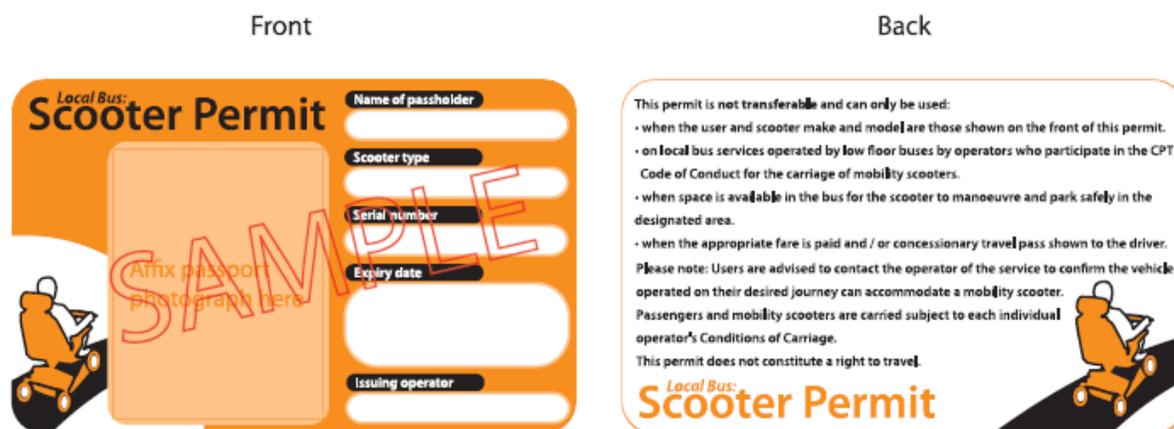
The CPT is a government-recognized trade association for the bus, coach and light rail industries. The new code was developed in consultation with the Department for Transport and is based on the practical experience of bus companies that had been operating voluntary schemes for a number of years. Any bus operator that is a CPT member has the option of adopting the code. As at February 2013, 22 companies have signed up, as follows:

- | | |
|------------------------------------|-------------------------------|
| ▪ Arriva | ▪ Quality Line |
| ▪ Blackpool Transport Services Ltd | ▪ Reading Transport Ltd |
| ▪ Bluestar | ▪ Safeguard |
| ▪ Centrebus | ▪ Southern Vectis |
| ▪ Country Bus | ▪ Stagecoach |
| ▪ Firstgroup | ▪ Thamesdown Transport |
| ▪ Ipswich Buses | ▪ Transdev Blazefield Limited |
| ▪ Metrobus | ▪ Trentbarton |
| ▪ National Express | ▪ Western Greyhound |
| ▪ Nottingham City Transport | ▪ Wilts and Dorset |
| ▪ Prentice Coaches Ltd | ▪ Yellow Buses |

Bus operating companies that sign up to the code agree to put a scheme in place that will issue permits to people with scooters that meet certain specifications, and who have been trained and assessed to use their scooter on the bus safely. Below we outline the code in detail.

Permit

The CPT has developed a standard format for the permit (shown below). This means that, once a permit has been issued by one operator, the passenger should be able to use it with any other companies that have signed up to the code.



Scooter specification

To be eligible for a permit, mobility scooters must meet the following criteria:

- Scooters must be Class 2, rather than Class 3
- They must be no more than 600mm wide and 1000mm long
- They must have a turning radius of no more than 1200mm¹
- The scooter and the user together must not exceed the safe working limit of the ramp used to board the vehicle (normally 300kg).

These criteria have been set to ensure that the scooter user can board and position themselves correctly in the wheelchair space, no matter what the particular layout of the low-floor bus is.

Training and assessment

The CPT code specifies that the bus operator should offer mobility scooter users training and assessment to ensure they can use their scooter on the bus safely. This includes providing advice on which local routes are able to carry scooters (that is, those with low floors and/or on-board ramps), as well as offering training on boarding and alighting the bus. It is noted that the training session should include safety guidance, including instructions to:

- Travel up the ramp head on
- Park in the wheelchair space

¹ The turning radius is the size of the smallest circular turn (i.e. U-turn) that the scooter is capable of making.

- Reverse up to the backrest
- Switch off the scooter's motor when the bus is in motion
- Remain seated on the scooter throughout the journey.

Once the scooter user has been assessed as capable of safely manoeuvring their scooter on and off, they can be issued with a permit for travel.

Permit conditions

The scooter permit comes with a number of conditions of use. It should be valid for a fixed duration, as scooter users' abilities may change over time. The user is also responsible for keeping their scooter in good working order, avoiding customizations that could cause an obstruction, and not overloading the scooter. The bus companies also reserve the right to withdraw the permit if it is misused.

Driver training

Driver training is also included in the CPT code – it specifies that any disability awareness training given to drivers should include information on mobility scooters. In particular, drivers should be made aware of how the permit system works and the types of scooter allowed to travel, and advised about safety and emergency procedures when scooter users are using a ramp to board the bus.

CPT information materials

The CPT has produced a range of documents to assist in implementing the code:

- An **information leaflet** outlining the details of the code. The leaflet is aimed at operators and staff as well as the public, and can be branded and distributed by individual bus companies.
- **Template letters** to give to scooter users enquiring about the scheme, or to those who have been turned away because they do not have a permit.
- A **credit-card sized template permit**, which has space for a passport photo of the scooter user, along with details of the scooter's make, the expiry date and the issuing bus operator. Basic terms and conditions are shown on the back.
- **Visual recognition guides** to help drivers be aware of the difference between Class 2 and Class 3 scooters.

These materials are all available for download from the CPT's website, which has a page outlining the details of the code (see tinyurl.com/CPTscooters)

Transport for London Mobility Aid Recognition Scheme

In June 2012 Transport for London (TFL) chose to implement their own Mobility Aid Recognition Scheme for use on London buses, independently of the CPT. The scheme has many key similarities to the CPT code. Specifically it requires mobility scooters to meet the

Carriage of mobility scooters on public transport – research findings

same specifications as those outlined by the CPT above and requires scooter users to be able to safely manoeuvre onto and off the bus.

Training for applicants is offered through the TfL Travel Mentoring Scheme, although this is optional, rather than a formal requirement.

One distinction of the TfL scheme is that while it is primarily aimed at people with mobility scooters, it can also be used by people with manual or powered wheelchairs, mobility walkers, buggies for children with disabilities or shopping trolleys, where these are used as a mobility aid.

TfL has developed its own distinct permit card (see below) and information materials. Applicants for the permit are required to sign a TfL Conditions of Use document before applying, which outlines the dimensions of allowable scooters and safety requirements.

TfL are happy to accept the CPT scooter permit card on London buses though recommend that frequent users apply for a TfL Mobility Aid Card. They also publish a pdf list of mobility scooters with dimensions, drawn from online information and applicants to the scheme.

Front



Back



Progress on implementation by bus operators

Interviews were held with representatives from the CPT and a selection of bus operators - Transport for London, Stagecoach, First Group and Thamesdown Transport - to identify progress to date. The discussions also covered their views on 'kitemarking'/labelling scooters and these issues are reported in Section 7.

Confederation of Passenger Transport UK (CPT)

Scheme progress

Operations Director Stephen Smith confirmed that since introduction of the code in June 2011 there had been no major issues or concerns.

The CPT recognised that some companies were slightly slower than others at full implementation and although there was no formal centralised monitoring, overall the CPT were pleased with the progress to date.

Publication of consumer information

The CPT did however feel that the scheme needed greater publicity to consumers – via the bus operators and sources of consumer information on mobility such as specialist media and disability organisations.

It was felt that the planned publication by Rica of a list of mobility scooters that met the CPT specification criteria would be beneficial – both to consumers and the bus companies' staff. Furthermore the CPT would be happy to link to and promote this information.

Research

On the question of future research the CPT felt there was a need for additional research relating to

- stability (on ramps and positioning relative to direction of travel)
- usability of controls
- general design
- collection and analysis of accident statistics.

Transport for London (TfL)

Scheme progress

TfL Travel Advice & Membership Manager Paul Carter and Operator Staff Development Manager Simon Wallis were interviewed. 116 applications had been received and 60 cards issued from launch of the scheme in June (as at November 2012).

TfL were keen to emphasise that their scheme was aimed at maximising social inclusion and that it wasn't a test. It was stressed, however, that people must be able to get on and off the bus safely. This included both their own safety and that of other passengers. They noted that some scooter users have had to be excluded as they are unable to safely manoeuvre their scooter even with training support through the mentoring scheme. In these cases TfL suggest other travel options.

The cost of running the mobility permit scheme and providing mentoring for scooter users were discussed, but were felt by TfL to be marginal, when compared to the wider work of their Travel Mentoring team.

Publication of information on scooters

TfL's travel mentoring team has compiled and publishes online a list of scooters that are suitable for use on its buses. This has been collected from online sources and scheme applicants and therefore includes a number of overseas and second hand models. The data has not been verified with manufacturers and does not generally include turning circle data.

TfL welcomed Rica's research to collect and publish more detailed scooter data and verify this with manufacturers.

Research

Research was discussed and TfL noted that in 2009 they had commissioned research from CCD Ltd to help develop their policy for mobility scooters on buses. This included desk research into the dimensions of smaller scooters and trials with 12 scooter users boarding and alighting a rig (the latter carried out by Rica). The trial showed that there is a complex interaction between length, width, turning circle, physical form, handle bar width, action and control which determine whether mobility scooters fit. The research also found that scooter users' ability to enter a bus was highly varied as individuals range greatly in confidence and capability.

On the question of future research TfL welcomed additional research relating to

- stability (on ramps and positioning relative to direction of travel)
- user information

First Group

Scheme progress

Projects Director UK Bus John Birtwistle noted that First Group had dealt with 71 applications for scooter permits as at December 2012. 65 permits had been granted and 5 refused (including refusals for class 3 road-going scooters) and one was currently awaiting assessment. Those approved for a pass have been issued with a permit and copy of the CPT information leaflet, customised for the relevant First Group operating areas.

Safety issues and assessment were discussed and First Group's view is that the risk element is managed as long as the assessment remains by First Group staff and other CPT code members. Concern was however raised over modifications made to scooters by their users. For example the addition of mirrors, shopping bags and homemade baskets, all of which increased the basic scooter size.

Publication of consumer information

First Group's experience was that some scooter users didn't believe they needed to be assessed. Consequently it was important that any consumer information should emphasise the importance of this element. First Group believed that the key to the scheme is an understanding that the assessment is a two-way process of ensuring the safety of the scooter user and that of other bus passengers. The emphasis at First Group is on using training to help people to pass the assessment.

FirstGroup were keen to see more consumer publicity for the scheme in general and welcomed the planned publication by Rica of further information and a list of mobility scooters that fit the code specification.

Research

In terms of further research, FirstGroup were supportive of any further safety related research and the collection and analysis of accident statistics, as they had looked for this and found none.

Stagecoach

Scheme progress

Regional director Robert Andrew was interviewed and confirmed that each local operator in the group had been trained and data indicated that 280 permits had been issued as at the end of November 2012. A further 66 had been refused at assessment and 18 were currently awaiting assessment. A few refusals were due to the ability of the user, but the vast majority came from scooters exceeding the code dimensions - in particular in Yorkshire where users of the Supertram with large scooters were incorrectly encouraged to be assessed.

Stagecoach had however experienced no major issues with implementing the CPT code - primarily it was felt because of the earlier work carried out by the company as part of its development. The company had been accepting some scooters for a number of years, issuing letters that users could show to the driver to prevent any confrontation or embarrassment. It was noted however that some users didn't seem to understand that their larger scooter size meant they couldn't go on buses, or that their lack of manoeuvring skill can present a hazard.

Training and assessment is carried out at depots or, depending on the location of the applicant, sometimes the bus and driver goes to the person. Stagecoach encourages companies to work with users. The key focus of the training is on how to line up to get on the bus and then manoeuvre into the space. The company have also run some open days, e.g. through the PTE (Passenger Transport Executive) in South Yorkshire.

All drivers carry a supply of leaflets to give out (following the CPT template) and they have run a poster information campaign in buses.

Thamesdown

Scheme progress

Operations Manager Kevin Wildy noted that Thamesdown had not yet introduced the full scheme, but were trialling it to identify issues. As part of this, half a dozen letters have been issued (instead of permit cards). The letters specify which bus types/routes the user can travel on.

The key issue for Thamesdown is that its mixed fleet has meant that some scooter users can manage some buses within the fleet, but not others. All Thamesdown buses have a legally compatible wheelchair space, but they have different access to that space. Thamesdown are phasing out the buses that are less easily accessible, but they will still have a mixed fleet with smaller and larger buses.

Currently only a couple of scooter users can manage all bus types. Thamesdown noted that they want people to succeed, but sometimes they just can't and others can manage some types of bus and not others. Training and assessment has been organised by appointment and the bus is brought to the scooter users' closest stop. After getting on they are then driven if necessary to a nearby easy/convenient place to practice and subsequently to a bus garage to try other types of bus. 1-1 ½ hours is allowed for these appointments.

Consumer views and experiences

Introduction

A focus group and interviews were held with a small sample of around 20 scooter users to identify experiences of taking a scooter on public transport, and opinions on the usefulness of a kitemarking or labelling scheme. The facilitated focus group of 8 scooter users took place in the Milton Keynes area, and 10 individual interviews were held at *Naidex South*, a public event in London exhibiting care and mobility equipment. In addition, a number of scooter users have approached Rica directly during the study to provide their views and experiences.

Respondents were generally keen to use public transport with their mobility scooter, but in some cases real or perceived barriers prevented them from doing so. In the words of one interviewee, “petty things get in the way”. In general, the barriers mostly related to the transport operators' policies, the vehicle environment, or to staff attitudes. Some respondents criticized the lack of co-ordinated effort between transport companies to provide accessible journeys.

Three interviewees regularly took their scooter on the bus without difficulty, while others were not able to. None of the focus group participants were regular bus users.

Comments relating to bus operator policies:

- **Scooters above the size limit.** Some interviewees' scooters were too big, and some focus group members had stopped trying to use the bus because of their experience of being disallowed. Some of these users had regularly been able to use buses in the past, but were now no longer allowed due to the size limits and/or requirement to be able to manoeuvre and position correctly into the wheelchair space i.e. facing backwards to the direction of travel.

- **Unclear policies.** A lot of respondents were uncertain what their local bus companies' scooter policy was. One interviewee who used to be able to take her scooter on the bus but now couldn't, did not know what feature of her scooter was causing the problem.
- **Problems accessing permit schemes.** One interviewee had concealed the fact that their scooter was slightly over the size limit in order to get a permit. Another had to wait four months for a response to his enquiry about a permit. He was then told he'd have to get an assessment, but not where or how to do this.

Comments relating to the bus environment:

- **Inaccessible buses.** Some focus group participants said that not all of their local bus companies carried ramps. One interviewee also said that the accessibility of buses also varied within specific routes, creating uncertainty.
- **Manoeuvring.** The general view was that manoeuvring within a bus can be tricky, but not impossible. However, one interviewee said she needed to be given enough time to do so – she felt a bit rushed sometimes.
- **Use of the wheelchair space.** People in the focus group felt there was a conflict here. Although they were not regular bus users, they believed they'd be given a lower priority compared to wheelchair users and baby buggies.
- **Driver attitudes.** Respondents were concerned that individual drivers might decide not to let the scooter user on, or be unwilling to help them board the bus. This added to scooter users' feelings of uncertainty when undertaking bus journeys – for them, there was no way of knowing how accommodating the driver would be.
- **Size and design of the 'wheelchair' space**
Some scooter users with larger Class 3 scooters felt that it was discriminatory not to be allowed access to public transport. They required a larger scooter to meet their personal mobility needs and felt buses should be designed to provide a larger and more easily accessible space than the current 'reference wheelchair' standard.

Scooter models that meet the CPT code requirements

Rica has identified mobility scooters currently on the UK market that fit the dimensions set out in the CPT code in terms of class, length, width, weight and turning circle². The list of c20 scooters that meet these dimensions is included as Appendix 1. It is also available to consumers and operators as a downloadable pdf list from Rica's website (www.rica.org.uk). In April 2013 the data will be available as a searchable database of mobility scooters with the launch of a new Rica website.

² Weight has not been used to determine which scooters are included on the list, because at 300kg the limit (which applies to the scooter and user combined) will easily accommodate all potential users and scooters of this size.

The pdf list is limited to scooters that *exactly* meet the code requirements on dimensions and are widely available on the UK market (or have been within the last 12 months). Individual bus operators may wish to decide for themselves how much leeway they allow when granting scooter permits.

Research methods

The list was created using robust research methods. Product specification data provided by the British Healthcare Trades Association (BHTA), the Disabled Living Foundation (DLF) and Motability was integrated with data already held by Rica. Data was also added from a list of mobility scooters which Transport for London (TfL) had identified as meeting the same size criteria for their own scooter permit scheme. Once integrated, records for mobility scooters that were outside of the CPT's specifications were removed. Finally the data was cleaned to remove duplicates and checked against the specifications listed on the relevant manufacturers' websites and models discontinued more than 12 months ago removed.

Verification

As a final stage, each individual manufacturer was contacted and asked to verify their product data and given the opportunity to provide data for any other of their scooters which fitted the CPT code.

Publication and promotion to consumers

As part of this research project Rica has undertaken to promote on an ongoing basis information on scooters that fit the CPT code to consumers and retailers. This will be carried out through promotion of our online and print publications, and through our contacts in industry and with other information providers as detailed below.

It is also recommended that individual bus operating companies operating permit schemes will also undertake to increase their publicity locally. While these schemes are all relatively new, our research with consumers, retailers and manufacturers found that few were aware of local bus company' policies on mobility scooters. Wider promotion of the CPT code and similar schemes, along with scooters that meet its criteria, will help reach individuals that otherwise might not have taken advantage of the scheme.

Website information (www.rica.org.uk)

Online guidance has now been published on Rica's website to both inform consumers about the various scooter permit schemes in operation amongst bus companies, and to provide a detailed list of suitable scooters currently on the UK market. The guidance clearly explains the criteria for travelling with a scooter and discusses assessment requirements, as well as available training. The downloadable list of the scooters includes a photograph of each scooter along with its specifications and the manufacturer's contact details.

Rica's website will be updated in April 2013. As part of this, we will be launching a new searchable database of over 300 mobility scooters. Consumers using the database will be able to specifically search for scooters that can be taken on the bus. The current Rica online information can be viewed online at www.rica.org.uk.

Media promotion

Rica will be publishing articles with information on the CPT code and TFL scheme in a range of specialist magazines aimed at disabled and older people. This includes the monthly magazines of Disabled Motoring UK, the Homecare Industry Information Service, and Disability Now. We also hope to place articles in Motability Lifestyle magazine (400,000 circulation) and OT News (the magazine of the British Association of Occupational Therapists).

Our online guidance will also be promoted through our email newsletter, which is sent out to around 1000 contacts. Recipients include individual consumers as well as disabled and older people's organisations and occupational therapists.

Promotion through retailers and manufacturers

Retailers and manufacturers are both important sources of information to consumers. Increased awareness of the CPT code may also encourage manufacturers to invest in developing more scooter models that meet its criteria and retailers to sell these smaller models.

Our consultation with retailers and manufacturers has indicated that both are happy in principle to promote awareness of the new schemes and criteria for bus travel to potential customers. Rica will be promoting awareness of its online consumer guidance and list of suitable scooters to all identified manufacturers (c20). Through our links with the British Healthcare Trades Association (BHTA) we will also promote awareness to retailers.

Additional promotion

Consumer organisations

The online guidance and list of suitable scooters will also be promoted through our contacts within other organisations that provide scooter product information to disabled consumers: the Disabled Living Foundation (DLF), Motability, and Assist UK.

Public Transport – a guide for older and disabled people.

In April 2013, Rica will be publishing in print and online, a new consumer guide to public transport (to replace Wheels within Wheels). The new guide will provide practical information on bus, coach, train, taxi, air and ferry travel. It will include information about the new mobility scooter permit schemes, together with links to the Rica information on suitable scooter models.

Social media

Rica has an active Twitter account (@Ricability) with over 1000 followers. Promotion of our online guide through Twitter will allow us to reach mobility scooter users, retailers and manufacturers as well as other healthcare professionals and disabled and older people's organisations. We are also active on Facebook and LinkedIn. Through LinkedIn in particular we will be promoting our findings to professional contacts working in mobility, and to other disabled and older people's organisations.

Events and Exhibitions

Rica has a presence at a number of events and exhibitions taking place in 2013. This is an opportunity to disseminate information about scooters and buses. These include Rica stands at two major consumer exhibitions on mobility equipment: Naidex at Birmingham NEC and the annual Mobility Roadshow. We will also have a stand, or the opportunity to distribute flyers, at the Moving and Handling People conference (aimed at healthcare professionals with a strong industry presence) and The 50+ Show (a general-interest event aimed at consumers aged over 50).

Recommendations

Our analysis of current policies and consultation with industry and users indicate that the following actions could usefully help to ensure that existing and new schemes are successfully implemented:

Provision of data on mobility scooters

- Collection and free publication online of robust data of scooter models that meet CPT code wheelchair space dimension (1000mm x 600mm) including details of turning radius. This data has been collected by Rica as part of this study (Appendix 1) but ongoing research and update is required to keep up with the market.
- Widely promote this scooter data to consumers, bus operating companies, scooter retailers and consumer agencies and advisors.

Promotion of bus permit schemes

- Additional and continuing publicity is needed to both increase awareness of existing bus scooter permit schemes and to increase demand for additional companies to join the CPT code.
- Promotion needs to include local bus companies, including all staff, local authority, consumer groups and local scooters/aids and equipment retailers.
- Publicity about schemes should always provide clear information on the two aspects of criteria for carriage – i.e. dimensions of scooter *and* ability to safely manoeuvre.
- Permit schemes need to be well-administered and easy to access.

Monitoring and research

Carriage of mobility scooters on public transport – research findings

- Data should be collected centrally to monitor introduction and take up of scooter permit schemes, as well as any related complaint or safety data. This should include numbers of permits issued and refused.
- Feedback on customer experience should be collected through standard consumer research/feedback techniques such as mystery shopping and customer surveys.

4.0 MOBILITY SCOOTERS ON TRAINS

Introduction

Policies for carrying a mobility scooter vary significantly amongst the 27 train operating companies (TOCs) in the UK, who run trains and manage stations in specific geographical regions. Each one is responsible for developing their own Disabled People's Protection Policy (DPPP), which should include a statement of their policy on carrying mobility scooters. Rica investigated the scooter policies held by 26 of these TOCs (all but Eurostar and London Underground). This section of the report provides:

- An overall summary of TOC policy
- Individual TOC Mobility Scooter policies in detail
- What is happening in practice – consumer and TOC issues
- Details of scooter models that meet the reference wheelchair dimensional requirements

Research methodology

Details of TOC policies were initially collected through contact with their Customer Services/Assisted Travel teams and online published documents, including their DPPP.

Key issues and concerns were also discussed directly with David Sindall, Head of Disability and Inclusion at the Association of Train Operating Companies (ATOC) and with attendees at the October meeting of the ATOC Disability Group. Subsequently, further data was collected through two questionnaires circulated to the individual TOCs on Rica's behalf via ATOC. Finally all data has been verified with each TOC.

Overall Summary of TOCs' policies

Types of policy

Permit schemes

Seven TOCs³ have a permit scheme for mobility scooters. An application for a permit normally involves submitting the scooter's technical specifications to the TOC's Assisted Travel team. They may also ask for a photo of the scooter and/or user, along with manufacturers' documents as proof of the specification. One TOC (East Midlands) also contacts the manufacturer to check the accuracy of the documents. Another (Arriva Trains Wales) arranges for passengers to have their scooter assessed in person by their local station manager.

³ Arriva Trains Wales, East Midlands, First Capital Connect, First Transpennine Express, South West Trains and First Hull

TOCs with permit schemes tend to list more detailed criteria that scooters have to meet, as well as basic size requirements.

Scooters allowed

Twelve TOCs⁴ allow mobility scooters without operating a permit scheme. These TOCs also ask that scooters meet certain criteria, but tend only to specify length, height and weight restrictions.

Foldable scooters only

Five TOCs⁵ only allow scooters onto their trains when they've been dismantled and are being taken on as luggage.

No scooters

Island Line is the only TOC who won't carry mobility scooters at all. They are operated by South West Trains, who are currently carrying out a review into this policy.

Scooter specifications considered

Size

The size limits that TOCs put in place reflect the size of the wheelchair space (occupied by mobility scooters) built in to their carriages as this is the space that, if permitted to travel on trains, the mobility scooter occupies.

Sixteen TOCs⁶ adhere to the industry standard and provide a 1200mm x 700mm space, although four of these⁷ list more than one set of dimensions owing to variations in their rolling stock. Meanwhile, Southern allow scooters on most trains, but will only take foldable scooters on their 442 Express services. In these cases, most TOCs say that passengers will find out whether a given train will be able to carry them when they book assistance in advance.

No TOCs offer to accommodate scooters larger than 1200mm x 700mm, but three (East Midlands, First Hull and ScotRail) specify slightly smaller dimensions for all of their services.

Weight

Weight limits are based on the safe working load of the ramp from the platform to the train.

⁴ c2c, Chiltern Railways, CrossCountry, East Coast, Greater Anglia, London Overground, Merseyrail, ScotRail, Southeastern, Southern, Stansted Express and Virgin

⁵ Grand Central, Heathrow Express, London Midland, Northern Rail and Gatwick Express

⁶ Arriva Trains Wales, c2c, Chiltern Railways, CrossCountry, East Coast, First Capital Connect, First Great Western, First Transpennine Express, Greater Anglia, London Overground, Merseyrail, South West Trains, Southeastern, Southern, Stansted Express, and Virgin

⁷ East Coast, First Transpennine Express, and Southeastern

Twelve TOCs⁸ specify a weight limit of 300kg for the mobility scooter and the user combined. Four⁹ specify slightly lower weight limits, and two (Southern and South West Trains) vary their criteria. Virgin is the only TOC that allows scooters but does not specify a weight limit.

Footprint

Four TOCs (East Midlands, First Transpennine Express, South West Trains and Virgin) take footprint (i.e. number of wheels) into account, though they don't rule any scooters out on this basis. Instead, footprint affects the width they'll take on, or whether they need to check the scooter's dimensions ahead of travel.

Turning radius

Four TOCs specify a turning radius of either 1000mm (First TransPennine and First Great Western) or 990mm (ScotRail and Arriva Trains Wales). Two other TOCs (c2c and East Midlands respectively) mentioned that they took either the length or the footprint of the scooter to be enough of an indicator of its turning ability.

Gradient

The climbing gradient of a mobility scooter determines whether it will be easily able to climb the ramp from the platform to the train. Only three TOCs take this into account, however. First Great Western and East Midlands require 8°, while First TransPennine require 12°. First TransPennine's representative felt that this was the main barrier to scooters being eligible for a permit.

Other

First Great Western and First TransPennine require the scooter to have a freewheel setting. First Great Western also requires that the scooter be fitted with anti-tipping devices, that the passenger has enough mobility to move to a seat, and that the scooter be foldable for alternative transport if necessary. c2c asks that passengers have the driving competence to get on and off the train. No other TOCs specify further criteria.

Other related policies

Folding scooters

With the exception of Island Line, all TOCs allow folding scooters on their trains. Five¹⁰ offer assistance with all aspects of getting the scooter dismantled and taken on board (although some specify that this can only be provided when the assistance has been booked in

⁸ Arriva Trains Wales, Chiltern Railways, CrossCountry, East Midlands, First Capital Connect, First Great Western, Greater Anglia, London Overground, Merseyrail, ScotRail, South West Trains, Southeastern and Stansted Express

⁹ c2c, East Coast, First Hull, and First Transpennine Express

¹⁰ c2c, Heathrow Express, Merseyrail, Southeastern and Virgin

advance). Another seven¹¹ will help carry the scooter, but won't help dismantle it, while nine¹² can't guarantee any help with the scooter. East Coast and Gatwick Express leave it to their staff to decide whether they feel comfortable carrying the scooter. However, many representatives we spoke to didn't seem entirely certain of the details of their TOC's policy on folding scooters.

Wheelchair priority

Under Rail Vehicle Accessibility Regulations (RVAR) the 'wheelchair space' is designated for occupation by wheelchair users. Some TOCs interpret this legislation as giving priority to wheelchairs over mobility scooters.

The majority of TOC customer representatives consulted were not aware of legislation in this area. Twelve TOCs¹³ answered that priority for the space went to the person who had reserved it. c2c pointed out that because they had more than one wheelchair space, the conflict was unlikely to come up. However, East Coast and First Great Western have smaller wheelchair spaces in First Class so moving people around may not be completely straightforward. Greater Anglia (who also operate Stansted Express) said that wheelchair users took priority. This was in an email response, so no further details were available. Southern give priority to people who have reserved the space and to wheelchair users. London Overground does not have a policy in this area.

Moving to a seat

Seventeen TOCs¹⁴ stated that it's the passenger's decision whether they move to a seat or stay on their mobility scooter during the journey, although c2c, Greater Anglia, Southern and Stansted Express prefer that the passenger moves to a seat. Only First Great Western said that staying on the scooter was against their health and safety policy, and that passengers must be able to either walk to a seat or be helped there by a companion. Some other TOCs also brought up the fact that they are unable to help passengers move to a seat after they've got on the train, although some mentioned that they had a 'companion seat' right next to the wheelchair space.

Miscellaneous

All TOCs prefer that passengers book assistance (and the wheelchair space) at least 24 hours in advance. Booking in advance also secures priority for the space, and makes staff more likely to provide assistance at the station.

¹¹ First Capital Connect, First Hill, First Transpennine Express, Gatwick Express, Greater Anglia, Southern and Stansted Express

¹² Arriva Trains Wales, Chiltern Railways, CrossCountry, East Midlands, First Great Western, London Midland, London Overground, Northern Rail, and South West Trains

¹³ Arriva Trains Wales, CrossCountry, East Coast, East Midlands, First Great Western, First Hull, First Transpennine Express, ScotRail, South West Trains, Southeastern, Southern and Virgin

¹⁴ Arriva Trains Wales, c2c, CrossCountry, East Coast, East Midlands, First Capital Connect, First Hull, First Transpennine Express, Greater Anglia, London Overground, Merseyrail, ScotRail, South West Trains, Southeastern, Southern, Stansted Express and Virgin

East Midlands, c2c, and South West (regarding Island Line) are currently carrying out reviews into their general policy on mobility scooters.

Individual TOC Mobility Scooter policies in detail

The tables below summarise the key features of each TOC’s policy on carrying mobility scooters.

Arriva Trains Wales

Scooters allowed	Yes			
Specifications	Length	Width	Weight	Turning radius
	1200mm	700mm	300kg	990mm
Permit scheme	Yes. Customer Relations take the scooter’s details, and then arrange an assessment of its suitability at the passenger’s nearest Arriva-managed station.			
During journey	Stay on scooter or move to seat – passenger’s choice			
Priority for space	Goes to people who have booked			
Dismantled scooters	Allowed – but can’t guarantee that staff will help dismantle and carry			

c2c

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1200mm	700mm	250kg
Permit scheme	No. Because their station platforms vary in size, any permit would only be valid for a limited number of journeys		
During journey	Can stay on scooter if parked safely, but preferably move to a seat		
Priority for space	No policy. They say that enough spaces are available that there is rarely conflict		
Dismantled scooters	Allowed – staff will help to dismantle the scooter and carry it on board		

c2c assume that scooters within their specified length and width restrictions will have an acceptable turning circle, and have yet to encounter a scooter which doesn’t have enough climbing capability to get onto the train. They ask that passengers have the driving competence to steer their scooter on and off the train (although they do not assess this, as far as we’re aware). c2c have recently undergone a review of their policy on disabled passengers.

CrossCountry

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1200mm	700mm	300kg
Permit scheme	No		
During journey	Stay on scooter or move to seat – passenger’s choice		
Priority for space	Goes to people who have booked		
Dismantled scooters	Allowed – but can’t guarantee assistance. Staff will carry items within a reasonable weight limit.		

Chiltern Railways

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1200mm	700mm	300kg
Permit scheme	No		
During journey	Stay on scooter or move to seat – passenger’s choice		
Priority for space	Goes to people who have booked		
Dismantled scooters	Allowed – but staff will not assist with dismantling the scooter or carrying it on board		

East Coast

Scooters allowed	Yes			
Specifications	Rolling stock	Length	Width	Weight
	Electric, and Diesel standard class	1200mm	700mm	230kg
	Diesel first class	1200mm	550mm	230kg
	Alternative Diesel standard class	1200mm	620mm	230kg
Permit scheme	No.			
During journey	Stay on scooter or move to seat – passenger’s choice			
Priority for space	Goes to people who have booked, but they will move someone to first class if there’s a conflict			
Dismantled scooters	Allowed – but ‘work safe’ policy means that individual staff decide whether they feel able to help dismantle and carry			

East Coast use three different types of rolling stock, each of which allow for slightly different mobility scooter dimensions as shown above. Passengers will be advised at the station if they are boarding the diesel train with the alternative layout.

East Midlands

Scooters allowed	Yes			
Specifications	Length	Width	Weight	Climbing angle
	1000mm	700mm	300kg	8°
Permit scheme	Yes. Assisted Travel team ask for supporting documents showing the scooter's specifications, and may also contact the manufacturer to check their accuracy.			
During journey	Stay on scooter or move to seat – passenger's choice			
Priority for space	Goes to people who have booked			
Dismantled scooters	Allowed – but staff will not assist with dismantling or carrying. Cite liability issues as the reason for this.			

At present, only three-wheeled scooters are allowed on East Midlands trains – they assume that all of these scooters will have an acceptable turning circle. However, East Midlands' mobility scooter policy is currently under review. In future they are likely to allow four-wheeled scooters on their mainline services, but not their local ones.

First Capital Connect

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1000mm	700mm	300kg
Permit scheme	Yes, administered by Assisted Travel team.		
During journey	Stay on scooter or move to seat – passenger's choice		
Priority for space	Goes to people who have booked		
Dismantled scooters	Allowed – staff will not help dismantle the scooter, but will help carry it on and off the train. They also offer the use of a station wheelchair when getting onto the train, although passengers will still need to walk to their seat.		

First Great Western

Scooters allowed	Yes					
Specifications	Rolling stock	Length	Width	Weight	Turning circle	Climbing angle
	Most services	1200mm	700mm	300kg	1000mm	8°
	Coach G First Class HST; 166, 158, 153 trains	1200mm	650mm	300kg	1000mm	8°
Permit scheme	Yes. Assisted Travel team ask for documents showing scooter specifications, along with a photo. Staff from the passenger's local station may be able to have a look at the scooter to ascertain its dimensions. Permits are specific to one route only.					
During journey	Cannot stay on scooter. Must move to a seat or be helped to one by a companion.					
Priority for space	Goes to people who have booked. Trains have two wheelchair spaces – one can be booked and one can't.					
Dismantled scooters	Allowed – but staff will not assist with dismantling and carrying.					

The specifications above show the dimensions needed to be given a scooter permit. In addition, scooters must be fitted with anti-tipping devices and a freewheel setting. They must also be able to be folded, so that they can be taken on alternative transport when necessary.

Separately from the above, First Great Western's high-speed services and 158 trains can only carry Class 2 scooters with a triangular footprint. 165 Turbo services and Heathrow Connect services can only carry scooters that will fit in the vestibule area.

First Hull

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1000mm	610mm	250kg
Permit scheme	Yes, administered by Assisted Travel team.		
During journey	Stay on scooter or move to seat – passenger's choice		
Priority for space	Goes to people who have booked		
Dismantled scooters	Allowed – staff will not help dismantle the scooter, but will help carry it on and off the train. They also offer the use of a station wheelchair when getting onto the train, although passengers will still need to walk to their seat.		

First TransPennine Express

Scooters allowed	Yes					
Specifications	Scooter type	Length	Width	Weight	Turning circle	Climbing angle
	3-wheeled	1200mm	700mm	250kg	1000mm	12°
	4-wheeled	1120mm	560mm	250kg	1000mm	12°
Permit scheme	Yes. Assisted Travel team ask for documents showing scooter specifications, along with a photo of the scooter and the user, and details of the user's local station. Users can come and test accessibility of local station in advance.					
During journey	Stay on scooter or move to seat – passenger's choice					
Priority for space	Goes to people who have booked.					
Dismantled scooters	Allowed – staff will not help dismantle the scooter, but will help carry it on and off the train. They also offer the use of a station wheelchair when getting onto the train, although passengers will still need to walk to their seat.					

Scooters must also be fitted with a freewheel setting, and there is a height limit (for the scooter and user combined) of 1350mm.

Gatwick Express (operated by Southern)

Scooters allowed	Dismantled only. Staff may assist with carrying the scooter, depending on its size.
------------------	---

Gatwick Express point out that Southern operate other train services from Gatwick to London which do accept mobility scooters, and which only take slightly longer.

Grand Central

Scooters allowed	Dismantled only.
------------------	------------------

Grand Central did not respond to our telephone requests for information. The above information is based on their DPPP.

Greater Anglia

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1200mm	700mm	300kg
Permit scheme	No.		
During journey	Can stay on scooter, but preferably move to seat.		
Priority for space	Goes to wheelchair users.		
Dismantled scooters	Allowed – staff will not help dismantle the scooter, but will help carry it on and off the train.		

Heathrow Express

Scooters allowed	Dismantled only (because of issues securing assembled scooters). Staff will assist with dismantling the scooter and carrying it on board.
------------------	---

Island Line (operated by South West Trains)

No mobility scooters are currently allowed on Island Line trains, although this policy is currently under review.

London Midland

Scooters allowed	Dismantled/folded only – staff will not assist with dismantling scooters or carrying them on board.
------------------	---

London Overground

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1200mm	700mm	300kg
Permit scheme	No		
During journey	Stay on scooter or move to seat – passenger’s choice		
Priority for space	No policy		
Dismantled scooters	Allowed – but staff will not assist with dismantling the scooter or carrying it on board		

Merseyrail

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1200mm	700mm	300kg
Permit scheme	No.		
During journey	Stay on scooter or move to seat – passenger’s choice		
Priority for space	No policy		
Dismantled scooters	Allowed – staff will assist with dismantling and carrying on board.		

Northern Rail

Scooters allowed	Dismantled only (because of space). Staff will not assist with dismantling the scooter or carrying it on board.
------------------	---

ScotRail

Scooters allowed	Yes			
Specifications	Length	Width	Weight	Turning radius
	1040mm	560mm	300kg	990mm
Permit scheme	No			
During journey	Scooter user must move to a seat			
Priority for space	Goes to people who have booked.			
Dismantled scooters	Allowed – but can't guarantee assistance with dismantling or carrying on board.			

Before their first journey, mobility scooters must be inspected by staff at the passenger's local station to make sure they meet the correct dimensions.

South West Trains

Scooters allowed	Yes			
Specifications	Scooter type	Length	Width	Weight
	3-wheeled	1200mm	700mm	230-300kg
	4-wheeled	1120mm	560mm	230-300kg
Permit scheme	Yes. Permits can be issued online or through contacting the Assisted Travel team. Scooter specifications are required.			
During journey	Stay on scooter or move to seat – passenger's choice			
Priority for space	Goes to people who have booked.			
Dismantled scooters	Allowed – but can't guarantee help with dismantling and carrying the scooter.			

Southeastern

Scooters allowed	Yes			
Specifications	Rolling stock	Length	Width	Weight
	Mainline (class 375, 465-9, 395)	1200mm	700mm	300kg
	Metro line (class 376, 465, 466)	1000mm	550mm	300kg
Permit scheme	No			
During journey	Stay on scooter or move to seat – passenger's choice			
Priority for space	Goes to people who have booked.			
Dismantled scooters	Allowed – staff will not help dismantle the scooter, but will help carry it if assistance has been booked in advance.			

Southern

Scooters allowed	Yes, on some services			
Specifications	Rolling stock	Length	Width	Weight
	Most trains	1200mm	700mm	230-300kg
	Class 442 Express trains	Dismantled scooters only		
Permit scheme	No			
During journey	Passenger's choice, but prefer they move to a seat			
Priority for space	Goes to people who have booked and to wheelchair users			
Dismantled scooters	Allowed – staff will help carry the scooter if assistance has been booked in advance.			

Southern's specifications vary with the type of rolling stock being used. This should be visible on National Rail enquiries, and will also be mentioned when the passenger books assistance.

Stansted Express (operated by Greater Anglia)

Scooters allowed	Yes		
Specifications	Length	Width	Weight
	1200mm	700mm	300kg
Permit scheme	No		
During journey	Can stay on scooter, but preferably move to a seat		
Priority for space	Goes to wheelchair users		
Dismantled scooters	Allowed – staff will not help dismantle the scooter, but will help carry it on and off the train.		

Virgin

Scooters allowed	Yes	
Specifications	Length	Width
	1200mm	700mm
Permit scheme	No	
During journey	Stay on scooter or move to seat – passenger's choice. 'Companion seat' next to the wheelchair space available.	
Priority for space	Goes to people who have booked	
Dismantled scooters	Allowed – staff will not help dismantle the scooter, but will help carry it on and off the train.	

Three-wheeled scooters will generally be assumed to meet the size criteria, while four-wheeled scooters will often be checked ahead of travel.

What is happening in practice?

To get an understanding of current issues and experiences of scooter travel on the trains we consulted with ATOC and TOCs, as well as a small number of scooter users. We also attempted to collect data from TOCs on activity levels – numbers of permits issued and journeys undertaken - although this was less successful. Here we report on the findings of this research:

Activity to date – numbers of permits issued and journeys undertaken

TOCs were asked to provide data (via a request from ATOC) on activity. Unfortunately only two of the twenty six TOCs provided information and a few noted that they did not currently collect this data. The following information was received:

	<i>First Group (Scotrail)</i>	<i>East Midlands</i>
No. of scooter permits issued	Not provided	28 (rejected 31)
No. of scooter journeys undertaken	c160 average per month (data provided March- Sep 2012)	Data not recorded

Current TOC issues and experiences

Each TOC was sent a questionnaire to collect feedback on their experiences and any issues or concerns relating to mobility scooters. The topic was also discussed collectively at the ATOC Disability Group meeting in October 2012. Issues highlighted by the TOC representatives were:

Scooter size and boarding

- Ramp gradient varies and in some cases the incline is too great. First Transpennine noted they require that scooters can go up 12° and turn inside 1m on their services.
- Variation in ramp width and platform width. Can use longer ramp to reduce gradient, but only where platform width allows, and where scooter weight is lighter.
- Booking is self-assessed and some users say their scooter is smaller than it is when booking, unknowingly or knowingly.
- People change their scooters but continue to turn up expecting to get on with their new larger scooter.
- All trains, taxis etc take reference wheelchair size – simple solution if scooter is a ref wheelchair size or smaller, then it can board - only issue is gradient.

Retail and manufacturer issues

- Dealers give misleading information to customers.
- Second hand scooters can come with missing product information.

- Gradient the tricky thing - scooters get stuck at the top of ramp sometimes.
- Manufacturers and retailers don't understand the complexity of rail policies so often take an educated guess they can go on. Or seemingly just tell consumers they can board regardless.
- How many scooters are being sold and their size? Perception is they are getting bigger.

Legislation/Policy

- Needs a joined up approach as TOCs can't guarantee the rolling stock that will arrive, and more than one operator may go from A to B.
- Confusion over whether TOCs have a legal obligation to keep a wheelchair space available for wheelchair users. Legal clarification is required to take away grey area. Easy option for now is – no scooters on trains unless they fold up as hand luggage.
- Two extremes of policy currently exist e.g. 1) Southwest trains – if your scooter fits in a specific kinetic envelope you are fine to board. 2) London Midland – if it can be brought on folded as hand luggage then fine, otherwise not allowed
- Some TOCs had received complaints - scooters blocking the vestibule area and wheelchair users can't get on.
- DfT have never informed TOCs whether scooters should/shouldn't be allowed – not even about road legal Cat 3 vehicles. DfT are sitting on the fence because they don't know the scale of the issue and don't want to take the tricky decisions.

Safety

- American research was cited as showing scooters can fall over. Therefore needs to go in wheelchair space for safety of the user and other passengers. Orientation of scooter is important.
- Scooters are not designed to be taken on public transport so for safety users must dismount. You then have 'luggage in the wheelchair space' issue.

Inaccessible stations

- Taxis are used to get people to and from accessible stations if the one they want to go to, or start from, aren't accessible. BUT taxis are not obliged to take mobility scooters – depends on the company. If you don't collapse the scooter they are not stable to be put in a taxi.

Training

- Training - capability of the users is equally critical.

Consumer Consultation

Introduction

Our research with scooter users included a facilitated focus group of 8 people from the Milton Keynes area, as well as 10 face to face interviews at a public event in London exhibiting care and mobility equipment. Focus group members used trains more frequently than buses and three of the London interviewees were able to easily take their scooter on the train, while others had more problems. Below we summarise their comments:

On train operators' policies:

- **Lack of consistency.** Focus group participants were exasperated by the differences between different train operators' scooter policies. For example, one participant could easily take her scooter on Virgin trains, but not London Midland ones.
- **Dismantled scooters.** One interviewee had few problems travelling by train because her scooter folded into a single, suitcase-like section. However, the policy of only taking dismantled scooters was more of a problem for another interviewee, because she wasn't able to dismantle the scooter by herself.

The train environment

- **Station accessibility.** Travelling with a mobility scooter limited respondents to using their nearest accessible train station – and if there was a fault there, such as a broken lift, they could be stranded or face major delays.
- **Train-platform gap.** One interviewee had two scooters, but only her larger model was able to climb the gap between the platform and the train without any problems.
- **Rush hour.** An interviewee commented that they were generally “warned off” travelling by rail during rush hour, because the crowds would make it harder for them to use their scooter.

Staff and booking assistance

- **Staff assistance.** Focus group participants stressed the importance of being able to easily get on and off the train, and were mostly positive about the help they'd received from staff.
- **Station co-ordination.** Some interviewees brought up more negative experiences with staff assistance – mainly incidents where staff at their departure station had failed to phone ahead and arrange for a ramp to be provided at their destination.
- **Booking in advance.** Most focus group participants said they would book assistance in advance. When booking, some found they weren't asked about the size and type of scooter they had – it was up to them to make sure they'd be able to fit on the train.

Mobility scooters that fit the TOCs' policies

The diversity of the different TOCs' policies on mobility scooters means that there cannot be a single list of mobility scooters that are suitable for travel on all trains. As well as setting out different size criteria because of variation in rolling stock, some TOCs also set out additional criteria relating to gradient and turning radius.

We have however developed a list of mobility scooters that will fit in an RVAR-compliant wheelchair space of 1200x700mm, as included in Appendix 2. This is the most common set of size criteria (specified by fifteen TOCs) and also the largest. This means that in future, this list could be refined and narrowed down for TOCs with stricter criteria. The list will also be published on Rica's website, www.rica.org.uk. Details of how this list was compiled is given in section 3 of this report.

The list was produced by integrating product specification data provided by the British Healthcare Trades Association (BHTA), the Disabled Living Foundation (DLF), and Motability with data already held by Rica (see chapter 3 for more information on these sources). Mobility scooters which did not meet the size specification of 1200 x 700mm were then removed from the list, as were scooters without size information. This left a list of c.130 mobility scooters, available in Appendix 2.

Recommendations

Our analysis of TOC policies and consultation with industry and users indicate that the following actions would usefully help to mitigate current issues:

Provision of data on mobility scooters

- Collect and publish freely online robust and current data of scooter models that meet reference wheelchair space dimension (1200mm x 700mm) including details of turning radius and gradient capability. This data has been collected by Rica as part of this study (Appendix 2), but ongoing research and update is required to keep up with the market.
- Access to this data should be provided to consumers through the National Rail Enquiries (www.nationalrail.co.uk) and Rail Travel Made Easy (www.railtravelmadeeasy.co.uk) websites.
- Widely promote this data to consumers, train operating companies, scooter retailers and consumer agencies and advisors.

Provision of permit schemes

- Permit schemes have the advantage of providing clarity about exactly which scooters are allowable and enable TOCs to ensure that consumers can safely manage their scooter. They also provide certainty to consumers.

- Where TOCs accept carriage of scooters, they should publish details of other TOCs that accept scooters where their services connect, including key interchange stations e.g. York, Manchester Piccadilly, Birmingham New Street, etc
- Where possible introduce a joined up approach across TOCs i.e. companies should agree to accept scooter permits for travel from TOCs with similar criteria for carriage.

Provide opportunities for training and assessment.

- If their scooter fits criteria for carriage, consumers should be provided with an opportunity to practice manoeuvring on and off a ramp of the required gradient and into a carriage. Advice should be provided on how to manoeuvre safely and travel. TOCs should be encouraged to deliver ‘try a train’ scooter days.
- The PTEG (Passenger Transport Executives Group) and regional PTEs should co-ordinate delivery of training/assessment opportunities across the different transport providers.

Monitoring

- All TOCs should collect and monitor data relating to scooter carriage. This should include: number and detail of pre-booked scooter journeys; data on permits applied for and issued, as well as any related complaint or safety data.
- Feedback on customer experience should be collected through standard consumer research/feedback techniques such as mystery shopping and passenger surveys.

Safety research

- Carry out user and technical research to provide additional guidance on manoeuvring a scooter onto and off a ramp, as well as positioning during travel. To include information on positioning relative to direction of travel; stability issues from carrying additional loading e.g. shopping and luggage; speed/acceleration for ramp negotiation etc.

Clarify legislation

- The Department should provide clarity on whether a mobility scooter is ‘equivalent’ to a powered wheelchair and whether it is legal to put a mobility scooter in the wheelchair space of trains, trams and buses, including if the passenger then gets off the scooter and moves to a seat. The majority of TOCs (and bus and tram providers) are taking the view that a scooter is ‘equivalent’ to a powered wheelchair, but this is not clear under current legislation.

Stations and platform accessibility

- An inclusive design approach should be promoted at all times as regards train, platform and station accessibility i.e. maximising accessibility and usability by as many people as possible. Maximising level access and minimising step gradients

Carriage of mobility scooters on public transport – research findings

assists *all* passengers - whether they are carrying luggage, using a pushchair, walking aid, wheelchair or scooter.

- Research should be carried out to evaluate the relative accessibility and cost of different methods of increasing platform height to achieve level access e.g. Harrington humps, TFL London Underground Olympics improvements.

5.0 MOBILITY SCOOTERS ON TRAMS

Introduction

Each tram company was contacted and asked to provide details of their policy and practices on scooter carriage. They were also asked to identify current concerns as well as priorities for future research. This section of the report provides:

- An overall summary of tram policies on mobility scooter carriage
- Individual policies in detail
- Recommendations

Overall summary

Of the seven tram operators, five allow carriage of mobility scooters. Of these, Sheffield Supertram and Blackpool Tramway have implemented variations on the CPT code (see Chapter 3) while the other three do not have formal limitations on the size and type of mobility scooter that can board.

Tram network	Allow mobility scooters?	Permit scheme?
Blackpool (Tramway)	Yes	Yes
Croydon (Tramlink)	Yes	No
Manchester (Metrolink)	No	n/a
Midlands (Midland Metro)	Yes	No
Nottingham (NET)	Yes	No
Sheffield (Supertram)	Yes	Yes
Tyne and Wear (Metro)	No	n/a

Individual tram policies

Blackpool: Blackpool Tramway

Background

Blackpool tramway completed redevelopment in April 2012, and is currently operated by Blackpool Transport. The trams have level access (ramps are not required), and there are conductors on board each tram.

Current policy/practice

Blackpool Transport currently operates an adapted version of the CPT code on the tramway, as well as on the buses. The original CPT code states that scooters must be Class 2 and meet certain specifications (1000mm length, 600mm width, 1200mm turning circle).

However, Blackpool Transport have made changes because of the high proportion of tourists using public transport in Blackpool. Because they are non-residents it would be impractical to assess all tourists and issue them with permits. Instead, tram staff are given recognition guides so that they can identify scooters that meet the CPT code. They also take the scooter user's capability into account, although the aim is to be as inclusive as possible. Some residents are issued with permits, however, and these are issued along with training and assessment.

In summer, around five people per day travel with a mobility scooter on the tramway. In winter, the figure is nearer one per day.

Blackpool Transport is considering bringing in a specific code for trams, following the example of the Sheffield Supertram. They feel that in their case, an identical scheme for buses and trams is the best policy and that their current arrangements work well.

Concerns

Blackpool Transport noted very few problems with mobility scooters and felt that there is little need for further safety research. There have been two incidents where people boarding with Class 3 scooters had been asked to leave, but this is the only issue that has come up.

The company felt that it is the responsibility of manufacturers and retailers to make it clear which scooters are suitable for public transport. They also believed that local hire shops (such as Shopmobility) should offer more advice on using scooters on trams and buses.

Information and comment provided by Trevor Roberts, Managing Director, and Bryan Lindop, Customer Services Coordinator, both at Blackpool Transport.

Croydon: London Tramlink

Background

London Tramlink provide the tram service in Croydon, which has been open since 2000. The trams have step-free access, and each tram contains two dedicated wheelchair spaces.

Current policy/practice

All mobility scooters can be taken on Croydon trams – there are no regulations on the types of scooter that can board and no permit scheme in operation. Partly because of this policy, there is no data on the number of mobility scooter users who use London Tramlink – although there is “a healthy number of mobility impaired customers using the service”.

Concerns

London Tramlink believe that there is a trend for increasing use of larger, heavier mobility scooters, and this is causing some concern. They have had complaints that some people are unable to take their scooters through the chicanes at the end of platforms, as well as more general complaints relating to large scooters.

Suggested research

One suggestion was for research into how to identify scooters which are too big to safely travel by tram, and how best to regulate the use of these. By contrast, research on scooter climbing gradient and stability was of less interest. London Tramlink have not had issues in these areas, partly because ramps are not used.

Information and comment provided by Emma Doherty, Interim Head of Engineering at London Tramlink.

Manchester: Metrolink

Background

Manchester's Metrolink tram network opened in 1992. New M5000 (Bombardier) trams were introduced in 2009, and are RVAR-compliant. The trams have level access to platforms (ramps are not required) and all stations/stops are wheelchair accessible. There are no conductors on board.

Current policy/practice

Mobility scooters may not be ridden on the Metrolink, but may be taken on if they are folded and covered

Concerns

Safety concerns were highlighted as the main reason for upholding the Greater Manchester Metrolink System bye law in terms of carriage of mobility scooters. A number of areas were identified as giving rise to concerns, including: congestion, the variable size of scooters, and potential lack of stability as the tram brakes and accelerates. This is a particular problem if the scooter is not parked in the wheelchair space, and is perpendicular to the direction of travel.

A number of incidents involving mobility scooters raised concern in TfGM that the bye law preventing mobility scooter carriage was not being upheld by the operator. Subsequent to this concern being raised, and investigations taking place, the decision was taken to ensure the operator upheld the bye law at all times. A review of the policy is currently being held pending any guidance as a result of DfT deliberations into mobility scooters and their interaction with trams.

Information and comment provided by Peter Cushing (Metrolink Customer Smart Project Leader, Transport for Greater Manchester) and David Partington Diversity Co-ordinator Transport for Greater Manchester).

Midlands: Midland Metro

Background

Midland Metro entered service in June 1999, with services operating between Wolverhampton and Birmingham, servicing Bilston and West Bromwich town centres as part of its line one route. It is operated by West Midlands Travel, a subsidiary of National

Express. Trams are level-access with two designated wheelchair spaces, and there is a conductor on board each one.

Current policy/practice

Mobility scooters are allowed to travel on Midland Metro. No formal restrictions on size or type are set, but access is at the discretion of the conductor. However, following discussions with other UK tram operators, Midland Metro are exploring the introduction of a permit scheme.

The number of people travelling with mobility scooters is not large, although there are some regular users. At the moment, numbers are low enough that usage does not pose a problem.

Concerns

Concerns were raised about the size of some mobility scooters, as well as how they are parked on board the tram. It was felt that poor parking could cause problems for other passengers. These issues come up in particular on occasions when a conductor is not present.

Suggestions

It was suggested that in future, restrictions on the size of mobility scooters would apply across the light rail industry. Discussions between tram operators and scooter manufacturers and suppliers would therefore be beneficial.

Information and comment provided by Paul Barefoot, Operations Manager at Midland Metro.

Nottingham: NET

Background

The Nottingham Express Transit (NET) tram system opened in 2004 and was built to be fully compliant with regulations set out in the Disability Discrimination Act. The network has step-free access throughout along with dedicated wheelchair spaces. Conductors are present on each tram.

Current policy/practice

At present, use of scooters on the trams is not regulated. However, from 2013 their revised Conditions of Carriage will specify that scooters must be able to fit into the wheelchair space. Scooter users will also be required to move out of the wheelchair space if a wheelchair user requires it, and when outside of the wheelchair space must park longitudinally. This is to reduce obstruction and minimise the risk of tipping.

Concerns

Concerns were expressed about a perceived trend towards the use of larger scooters, as well as the state of repair and stability of scooters more generally.

Suggested research

Increased guidance for mobility scooters, “the same guidance as we [get] for wheelchairs”, was suggested, as well as research into the use of insurance and driver competency testing to regulate mobility scooter use. It was pointed out that the use of scooters in pedestrian areas can be dangerous.

Information and comment provided by Steve Guthrie, Safety and Standards Manager at Nottingham Trams.

Sheffield: Supertram

Background

Sheffield Supertram was first opened in 1994, and is operated by Stagecoach. All trams now have wheelchair spaces, and the system is level access without the need for ramps.

Current policy/practice

Since October 2012, Supertram have been implementing a version of the CPT code permit scheme on their trams. In order to travel, scooter users must have a permit which shows that they have received training and that their scooter meets certain criteria (Class 2, 1000mm length, 600mm width, 1200mm turning circle, combined user/scooter weight under 300kg).

Supertram are not carrying out any of the training or administration themselves – scooter users are instead directed to local branches of First, Arriva and Stagecoach Bus.

Supertram’s adoption of the CPT code came about partly through their links with the Stagecoach bus company – they wanted to “ensure consistency across transport in South Yorkshire”.

The scheme has been publicised through a leaflet (adapted from the CPT’s original leaflet – see Chapter 3), information on the Supertram website, and promotion through the South Yorkshire Passenger Transport Executive.

Concerns

Before implementing the scheme, there had been concerns about over-sized scooters – but it is felt that the scheme has effectively addressed these concerns. Each tram has a conductor on board, meaning that permits can be regularly checked.

Information and comment provided by Claire Ansley, Head of Customer Service at Supertram.

Tyne and Wear: Tyne and Wear Metro

Background

Tyne and Wear Metro light rail system is owned and operated by Nexus, the Tyne and Wear Passenger Transport Executive. It is more similar to a railway than a tram system, in that it

runs on segregated track with an underground section in Newcastle and Gateshead, and partly shares track in joint running with heavy rail vehicles. It has no on-street running in a mixed traffic environment.

The Metrocars contain wheelchair spaces and the system is wheelchair-accessible. The system is largely unstaffed. At present, the fleet is undergoing refurbishment and is due to meet updated RVAR standards in 2015; station accessibility is also being enhanced in an on-going programme.

Current policy/practice

Mobility scooters may not be used on the Tyne and Wear Metro, although lightweight scooters that have been folded up may be carried on.

Concerns

A public report made to a meeting of the Tyne and Wear Integrated Transport Authority¹⁵ explains the background to this policy.

A temporary ban on the use of mobility scooters on Metro infrastructure was put in place in 2008, after four incidents occurred in which scooter users fell onto the track. Two scooter users fell from the platform, and another two incidents involved the scooter breaking through the Metrocar doors and falling out on to the track. Two of the incidents occurred after a requirement had been introduced for mobility scooter users not to travel unaccompanied.

Post incident analysis highlighted error on the part of the scooter users as the main cause of the accidents. In respect of the falls from the platform there were mistakes made by the users in manoeuvring their mobility scooter safely within the confines of the space available. The instances of going through the Metrocar doors were brought about by the mobility scooter user applying too much power during boarding and then not being able to bring the mobility scooter to a full stop in a safe distance once on board. However, it was also pointed out that the doors of the carriages (which were built in the 1970s-80s) were not strong enough to withstand the impact of the scooter; and that scooters are not designed to brake effectively enough especially if they board the carriage at speed.

Nexus looked into options for retaining the use of scooters on the Metro. They developed an outline for a training course for scooter users, and a set of specifications for scooters suitable for travel on the Metro (i.e. small, Class 2 scooters). However, they concluded that there would be no way to enforce these conditions without staff presence on every Metrocar or at every station. The Metro is a largely unstaffed system and it was decided that costs involved in recruiting and retaining sufficient new staff to achieve this would not provide good value for public money, and the ban on scooters was made permanent.

¹⁵ Available from <http://democracy.newcastle.gov.uk/mgConvert2PDF.aspx?ID=3377&T=10>

However, the report concludes by stating that Nexus will consider mobility scooter access as part of the design process for the new Metro rolling stock that will be needed to replace the existing fleet in the mid-2020s.

Future research

A recommendation for future research was an investigation into the extent to which mobility scooters are designed to meet a suitable standard for carriage on public transport.

Information and comment provided by Graham Robinson, Corporate Business Improvement Manager at Nexus.

Recommendations

Our analysis of tram operators' policies and consultation with industry representatives indicate that the following actions would be useful:

Provision of data on mobility scooters

- Collect and publish freely online robust data of Class 2 scooter models that meet reference CPT code and wheelchair space dimension (1000mm x 600mm; 1200mm x 700mm) including details of turning radius and gradient capability. This data has been collected by Rica as part of this study (Appendix 1), but ongoing research and update is required to keep up with the market.
- Widely promote this data to consumers, tram operating companies, local scooter retailers and consumer agencies and advisors.

Provision of permit schemes

- Permit schemes have the advantage of providing clarity about exactly which scooters are allowable and enable operators to ensure that consumers can safely manage their scooter. They also provide certainty to consumers.
- Where possible introduce a joined up approach across buses and trams within an area as this helps consumers, e.g. Blackpool Tramway and Sheffield Supertram arrangements.

Provide opportunities for training and assessment.

- If their scooter fits criteria for carriage, consumers should be provided with an opportunity to practice travelling by tram and offered advice on how to manoeuvre and park safely.
- Joint collaboration on training/assessment should be investigated with local bus providers.

Monitoring

- Customer experience should be collected through standard consumer research/feedback techniques such as mystery shopping and passenger surveys.

Safety research

- Carry out user and technical research to provide additional guidance on safe manoeuvring of a scooter onto a tram and positioning during travel. To include information on positioning relative to direction of travel and stability issues from carrying additional loading e.g. shopping and luggage.

Sharing good practice and research data

- Tram operators should seek where possible to share research and monitoring data on the implementation of scooter policies and permit schemes through the CPT. Although each network has some unique features, there are commonalities in overall tram design standards and customer journey experience.



6.0 BUS, TRAM & TRAIN DIFFERENCES

There are significant practical differences between journeys taken by bus, train and tram. These include the physical nature of the vehicle as well as their operating environment and the passenger journey experience. These differences mean that policies and practices suited to one mode of transport are not necessarily directly applicable to another. Below we highlight the main issues identified during the course of discussions with transport operators and mobility scooter users.

	Buses	Trams	Trains
Scooter users and their journeys	Casual, short-distance trips.	Casual, short-distance trips.	Longer distance, longer duration trips.
Booking or turning up	Assistance given on arrival.	Not always staff present to give assistance.	Book assistance 24 hours in advance.
	No booking, so if space is in use new passengers are turned away. Potential user concern that they will not be able to make journey out and back again with access to the wheelchair space.	No booking, so if space is in use new passengers cannot board. However, more than one space available.	Wheelchair space is reserved – priority goes to those who have booked. Provides confidence that space will be available.
External environment	Street environment needs to be accessible.	Varies – some stops are at stations while others are on-street platforms. Some tram networks have been built fully accessible, others not.	Train station needs to be accessible (step-free access to building, between platforms, etc.)
Boarding and alighting	Buses often low-floor or have ramps built in/available.	Tram networks have level-access boarding from platforms/stops with the exception of one older network which has ramp access.	External ramps – need to allow space to manoeuvre and maintain a safe climbing angle.

Boarding and alighting (continued)	One entrance for scooters.	Need to position in correct area of platform/stop for wheelchair space.	Need to position in correct area of platform for wheelchair space.
	Once boarded, layout means scooter user must be positioned in line with direction of travel.	Scooter user can easily stay perpendicular to direction of travel if no conductor – creates tipping risk.	Varies with rolling stock, but layout often makes it easier to position in line with direction of travel.
	Can disembark if have boarded.	On some systems, not all stops accessible.	Needs to be ramp and assistance at destination – staff must phone ahead. If can't disembark or station not accessible, must provide taxi to nearest accessible station (taxi must carry scooter).
On the journey	Vary in size – CPT code assumes majority can accommodate 1000mm x 600mm.	The same rolling stock is generally used throughout each individual network.	Rolling stock varies in size – different scooters may be excluded depending on the journey.
	Evacuation in emergency or breakdown same procedure as at bus stop.	If need to evacuate tram outside a stop, need to be able to assist scooter user. Replacement transport must be accessible, when used.	If need to evacuate train outside a station, need to be able to assist scooter user. Replacement transport must be scooter accessible too.
	Usually single journey with one local bus company, so same policy applies throughout.	One local tram company per area, so same policy applies throughout.	Often make connections and use other train companies, who may have different sizes and policies.
Other passengers	In practice, multi-purpose space – used by wheelchairs, scooters, prams and standing passengers.		Other passengers have more luggage – congestion and barriers.

Carriage of mobility scooters on public transport – research findings

Staff	Scooter users should be able to board unassisted. Staff need to be aware, but not provide direct assistance.	Not all tram companies have a conductor on each tram – so can't provide assistance, or check scooter is suitable.	Staff assist with boarding – have more training. More concern also for health and safety, property damage.
Safety	Not likely to give hands-on assistance, fewer health and safety concerns.		More ramps and equipment to use – more concern for staff health and safety.
	Low ramps less risky.		Steeper ramps to climb, so more risk of falling. More skill to be able to embark/disembark.
	Slight risk associated with other road traffic.	Risk of falling onto track, from platform or tram – operators are wary because this has happened in the past.	Risk of falling or knocking others onto the track (hence speed limit).
	Less smooth transit (turns, slowing, etc.)	Smooth travel, but large jolts possible when braking.	Smooth travel, but large jolts possible when braking.

7.0 SCOOTER LABELLING, KITE MARKING AND PRODUCT INFORMATION

Introduction

Kitemarking and product labelling as well as improved product information have all been suggested as possible solutions to assist consumers and operators identify scooter models suitable for carriage on public transport.

Views on these topics were discussed through telephone interviews and meetings with representatives from a wide range of organisations including manufacturers, retailers, consumers, transport operators and other interested parties. Below we first summarize the overall findings of the consultation. We then provide more detail on the various comments, as well as on the British Standards Institute (BSI) Kitemarking scheme. The organisations and individuals consulted were:

- Confederation of Passenger Transport (CPT)
- Association of Train Operating Companies (ATOC)
- Individual Train Operating Companies (TOCs)
- British Healthcare Trade Association (BHTA)
- Motability Operations Ltd
- Assist UK
- Scooter retailers (Handicare, Parkgate Mobility and London Mobility)
- Scooter manufacturers (Electric Mobility & Sunrise Medical)
- Which?
- Disabled Living Foundation
- British Standards Institute (BSI)
- Individual scooter users (18 people)

Summary of findings

Kitemarking

Consultation with the British Standards Institute (BSI) - who own the Kitemark trademark- indicate that development of a formal Kitemark for scooters tested for carriage on public transport is not a feasible current option.

Kitemarks – whether BSI or other product accreditation marks - are industry led and their development requires a very substantial commitment and investment from manufacturers, retailers and trade bodies. There is no evidence that the mobility scooter industry see this as a priority at present. In addition, testing would need to be to an agreed common Standard – again developed by industry. Separate accreditation marks for different types of transport is not considered practical.

Labelling

Product labelling was popular with some of those consulted and felt to potentially offer some assistance to consumers when purchasing a scooter. However, a number of concerns were raised:

- Transport operators felt that a label that related solely to the ‘accreditation’ of the scooter might mislead consumers. Whether or not a mobility scooter user can travel on public transport is a matter of two factors - the specification of the scooter and the user’s skills in manoeuvring safely.
- Consumers reported that their decisions about which scooter to purchase were based largely on other factors – particularly their physical needs, price and storage (in a car boot and at home).
- The variety of different scooter specifications included in the various TOC permit schemes was considered an issue when it came to any labelling any scooter as usable on trains.
- Labels are frequently removed, or wear off and are or not likely to be easily visible for example to a bus driver.
- Consumers can be ‘label blind’ given the overwhelming number of logos/signage.

Information

There was an overwhelming agreement that the preferred solution - given the complexities involved - was an improvement in the quality and availability of information. Many of those consulted felt that clearer information would lead to less confusion and potentially less confrontation. Priorities for information were:

Scooter Product Specification Data

- Reliable, independent product information to include: dimensions, weight, turning radius, and - importantly for train travel – maximum safe gradient.

This information was universally considered of value to all parties – consumers purchasing, bus and train operators, retailers and manufacturers advising customers and disability and trade organisations.

The presentation of the data should enable users and operators to easily identify scooters that:

- are within the CPT and TfL bus carriage specifications (1000mm length; 600mm width; 1200 turning radius; class 2).
- are within the reference wheelchair size dimensions (1200mm length and 700mm width) as this is the size accepted by the vast majority of TOCs that allow scooter carriage (although many set additional specifications of size, gradient and turning radius according to rolling stock).

Concern was raised about the possible lack of consistent measurement of turning radius and gradient data to agreed Standards. For example although different, the terms ‘turning circle’ and ‘turning radius’ are sometimes used interchangeably, also gradient climbing ability is not the same as maximum safe slope angle, which include dynamic and static stability tests.

Information about the CPT and TFL scooter schemes for buses

- Wider national and local publicity of these schemes was needed to increase consumer and retailer awareness.

Information about the various TOC scooter schemes for trains

- Again wider national and local publicity was needed to increase consumer awareness.

It was felt that clearer, more widely promoted information, might lead to less consumer confusion and confrontation about which scooters will and won’t be allowed on trains.

Targeted promotion of information

Suggested targets for promotion of information included:

Consumer organisations

- Disability/older person charities and mainstream

- Consumer websites on transport accessibility e.g. www.railtravelmadeeasy.co.uk and transportdirect.info
- Passenger Focus

Scooter Hire shops/organisations

- Shopmobility network

Mobility advisors

- Mobility Centres (national network of 17 centres)
- Independent Living Centres (national network of 41 centres)
- Motability (national powered wheelchair and scooter scheme)

Transport industry

- Transport Operators – promote to public via websites, staff/drivers, bus/train/tram advertising posters
- ATOC
- Network Rail

Mobility Scooter Industry

- Scooter Retailers
- Scooter Manufacturers
- British Healthcare Trades Association

Trade media & local media

The BSI Kitemark and other accreditation logos

The British Standard Mark - later known as the Kitemark was created in 1903.



Use of the Kitemark logo on a product means that the British Standards Institute (BSI) has independently tested it and confirmed that it conforms to the relevant British Standard. The symbol is designed to give consumers assurance that a product is safe and reliable. More generally the term 'kitemark' is used to signify adherence to agreed core standards - set and monitored by bodies other than the BSI. Examples of such product 'kitemarks' include the digital tick used during the recent Digital TV switchover in the UK to confirm core technical standards and the Fairtrade logo that confirms sourcing standards)



Discussions with the BSI certification team indicate that kitemarking mobility scooters as in some way compliant with public transport is not likely to be a feasible option. This is primarily because kitemarking requires industry to lead and finance the development of a common Standard, test programme and publicity. There is no indication that the scooter industry sees this as a current priority nor that a common standard is currently achievable across the different modes of public transport. Finally, consumers are likely to associate any kitemarking symbol with product quality and trust, rather than any specific dimensions or usage patterns.

Additional consultation feedback

Particular issues highlighted in the consultation were as follows:

Consumers

- Most consumers consulted said they had prioritised other factors ahead of public transport when purchasing their scooter. While a kitemarking or labelling scheme could be useful, it wouldn't have a major impact on their decision when purchasing a new scooter. Factors considered more important than being able to travel on public transport with their scooter were their physical needs – disability and stature and price.
- Some people noted that labelling would only work if all transport operators agreed to it and trained their staff to recognize it.
- The main barrier affecting scooter users travelling on buses seemed to be a lack of information on policies. People were also concerned that individual drivers might not be helpful. By contrast, people generally felt confident about manoeuvring their scooter on board the bus.
- Consumer concerns around taking scooters on trains centred mostly on station accessibility and the inconsistency between different train operators' policies.

Consumer organisations

- Any labelling or kitemarking scheme requires considerable and targeted promotion and information to make sure consumers are aware of it and use it.
- A concern at lack of any co-ordinated industry body to develop/validate a Kitemark scheme.
- A product label could be considered by consumers as acting as a pass onto public transport after scooter purchase. This would be a problem if it wasn't so.
- A more joined up approach from the TOCs, bus operators, manufacturers, retailers and regulators would be welcomed. But given the varying rules and so many people involved it was hard to imagine this ever being applied consistently.
- If there were a scheme that reliably identified products as usable on public transport and there was demand from customers, Motability would aim to display that information in their price guides.
- The Disabled Living Foundation would be happy to publish information about which scooters meet the CPT bus and TFL specifications.

Train operators

- TOC experience is that consumers are given misleading information by scooter salespeople - too many people in their view are told their scooters can go on trains when they can't.
- Reliable, easily available data on the gradient and turning radius of scooter models is particularly lacking.

- A central source of reliable data on scooter specifications and dimensions would be useful and stop everyone having to do their own research.

Manufacturers

- Scooters are available from many sources these days and it would be a very difficult challenge to introduce kitemarking/labelling. If only a handful of manufacturers use them, this is a drop in the ocean and does not solve the problem.
- Any labelling would require information alongside it so that people understood the procedures to follow. This would mean a co-ordinated approach to using rail and buses – which is very tricky.
- Electric Mobility noted the contradiction between the CPT requirement for scooters to have a length of 1000mm or less for travel on buses and the EU scooter standard (EN 12184) which recommends 1200 mm for this type of scooter. By shortening the length to 1000mm both legroom and stability issues can arise.
- All manufacturers consulted said they were in principle willing to carry information on their websites to identify scooters that met the CPT code specification requirements for bus travel.

Retailers

- Parkgate Mobility noted they were already promoting the CPT code through a partnership with South Yorkshire police. This included handing out the CPT yellow leaflet in their shops and running scooter training courses.
- All retailers consulted said they ask customers about whether they want to use the scooter on public transport as part of the discussion about lifestyle and use of the product.
- All retailers consulted would welcome information on which scooters fit the CPT code for bus travel and information on local bus companies signed up to the code.

8.0 ADDITIONAL RESEARCH

This study and consultation has highlighted the need for substantial further research relating to mobility scooters. The UK has seen a substantial growth in the private purchase and use of scooters with current estimates of around 330,000 users. A number of hypotheses have been put forward to explain the growth and these require further investigation. What is clear however is that the increase in scooter users has significant implications for UK transport policy and legislation - which are all currently based around the 'reference wheelchair' dimensions and invalid carriage categorisations based on speeds.

It is vital that legislation and policies are based on a sound body of robust data. At present this is lacking – as acknowledged by all those consulted. The specific areas of further research required are identified as:

Market research & analysis

- Size of the UK mobility scooter market
- Market growth projections
- European and US comparison
- Understand factors driving market
- Where/how consumers purchase (internet, mobility aid shops, Motability etc)
- Market share of different scooter classes/sizes and whether this is changing
- Prices (including relative to powered wheelchairs)
- Impact of prospective changes in disability payments (e.g. reduced numbers eligible for Motability schemes)
- Impact of NHS policies/budgets for powered wheelchairs

Collection of scooter product data

Product specification data has been collected by Rica for scooters that meet the CPT scooter code requirements for bus carriage and those that fit within the RVAR compliant wheelchair space of 1200mm x 700mm (see Appendix 1 and 2).

Collection of this data needs to continue to ensure that there is a central source of verified data available to industry and consumers. This data is not routinely or accurately published by retailers at present.

The data should be independently verified with manufacturers and include:

- Manufacturer/Model names
- Dimensions – length, width and turning radius
- Weight

- Designated class
- Number of wheels

Consumer research

This study included only very limited direct research with scooter users. Further and more extensive consumer survey work is required to understand scooter users' needs and experiences. This would include establishing:

- Consumer profile (age, disability, other demographics)
- Where bought and why (retailer, exhibition, telephone, online, Motability etc)
- Assessment received (including eye tests)
- Training received (type, location, views on cost)
- Information/instructions received (Class 2/3, speed, safety, insurance, etc)
- Other mobility aids used (are scooters used alongside or instead of other aids?)
- Perceived advantages compared to other aids (price, image, versatility etc)
- Planned/actual use (pavement, road, shopping centres, public transport)
- Storage and charging arrangements
- Car boot stowage
- Repair and maintenance issues
- Experiences/views of public transport carriage/permit schemes/booking

Safety research

As part of this study a research proposal form has been submitted to the Rail Safety and Standards Board. This was prepared in consultation with TOCs and with particular input from ATOC, Virgin and First Group. Below we outline in summary the research proposed. It should be noted that while some areas will be relevant to carriage of scooters on buses and trams, these operators may find it helpful to carry out additional research relating to their own specific transport type.

Rail Safety and Standards Board research proposal form

This recommends research to address the following questions:

General

- Quantify the risk of scooter use and carriage in the rail environment to other rail users and to rail staff.
- What are the critical points at which scooter users need information about rail services. Before purchasing a scooter, during journey planning, in-journey information etc?

Safe ramp climbing

- Previous RSSB research (T759) found that access ramps are often placed at steep angles because of a lack of platform space and that limited space may lead to people acting unsafely – e.g. trying to turn while on the ramp. Rica research indicates that mobility scooters are typically designed to climb shallower slopes of 6-8 degrees.
- To what extent do manufacturers' gradient claims take account of the particular circumstances pertaining to rail?
- How do scooter design, luggage/shopping/user weight and height affect dynamic stability during boarding and alighting from the range of rolling stock in use in GB?
- What is best advice to users in terms of acceleration, speed/turning in the rail environment?
- To what extent is the station environment conducive to scooter use (assess risk and safety factors) and what changes are required, together with an estimate of costs, in order that the station environment becomes safe?

Stability during travel:

- When parked correctly (back to direction of travel), is it safer for a passenger to stay on their scooter or move to a seat?
- How much is stability on board trains affected by parking incorrectly?
- How do scooter design, luggage/shopping/user weight and height affect dynamic stability?

Monitoring of policies and practice by operators

This study has been able to collect only limited data relating to the number of scooter journeys being undertaken on public transport and of permits issued. In many cases monitoring data is either not being collected, or is not centrally collated.

It is important to monitor activity levels and collect customer feedback to establish how well policies are operating in practice. It is recommended that the following monitoring research is undertaken by individual operators and – importantly - that there is collation centrally across each industry, to ensure that an overall picture of activity can be established.

- Data on permits applied for and issued – for individual operators and collated centrally
- Data on number and detail of rail journeys booked – for individual operators and collated centrally
- Complaint data
- Accident/safety related data
- Feedback on customer experience – via standard consumer research/feedback techniques e.g. as mystery shopping, journey shadowing and passenger surveys.

9.0 APPENDICES

Appendix 1: Scooter models that meet the CPT code requirements

The scooters on this list meet the criteria specified by the CPT code for the carriage of mobility scooters on buses (as well as Transport for London's Mobility Aid Recognition Scheme).

Information was collected from a range of sources and verified by manufacturers (see Chapter 3 for more detail).

Models marked with an asterisk (*) have been or are due to be discontinued, but are likely to be still being sold in some shops.

Manufacturer	Model name	Class	Length (mm)	Width (mm)	Weight, including battery (kg)	Turning circle (mm)
Drive Medical	Kite 3 Wheel	2	965	480	40	915
Drive Medical	Prism 3	2	950	470	42.3	858
Drive Medical	Rio Lite*	2	990	550	36.9	770
Electric Mobility	Micro Balance	2	980	520	39.7	975
Electric Mobility	Rascal Eco 3	2	1000	560	42	1010
Electric Mobility	Ultralite 380	2	960	510	37	988
Freerider	Luggie	2	1000	455	23.5	900
Freerider	Mini Ranger	2	990	510	50	1150
Freerider	Luggie Elite	2	1000	510	23.5	900
Monarch	Mini 4	2	950	470	42.3	1200
Monarch	Mobie	2	990	450	23	1180
Pride Mobility	Go-Go Elite Traveller (3W) (17 Amp)	2	910	490	47	825
Pride Mobility	Go-Go Elite Traveller (3W) (12 Amp)	2	910	490	43	825
Pride Mobility	Go-Go Elite Traveller Plus (3W)	2	910	537	65.8	876
Roma	Cameo 3*	2	950	560	43	940

Carriage of mobility scooters on public transport – research findings

Medical						
Roma Medical	Altea 4*	2	1000	550	32	1100
Roma Medical	Cameo 4*	2	1000	560	43	940
Roma Medical	Whisper [adjustable length]	2	940-1020	430	33	1000-1200
Sunrise Medical	Sterling Little Star	2	960	500	35	1100
Sunrise Medical	Sterling Little Gem 2	2	980	510	40	1150
TGA	Eclipse [heavy duty battery]	2	1000	480	55	1150
TGA	Eclipse [standard battery]	2	1000	480	45	1150

Appendix 2: Scooter models within reference wheelchair dimensions

The scooters on this list all fit the standard ‘reference wheelchair’ dimensions (1200mm length, 700mm width) which means they are able to travel on some trains. See Chapter 4 for more detail.

The data was collected from several sources (Motability, the Disabled Living Foundation and the BHTA – see Chapter 3 for more information) and then verified by the manufacturers, who also provided details of any models not already included.

Scooter models marked with an asterisk (*) have been or are due to be discontinued, but are likely to be still being sold in some shops.

Manufacturer	Model name	Number of wheels	Length (mm)	Width (mm)	Weight, including battery (kg)	Turning radius (mm)	Maximum gradient (degrees)
Advanced Vehicle Concepts	Quingo Air [without basket]	5	1070	560	56.5	1040	6
Advanced Vehicle Concepts	Quingo Compact [with basket]	5	1030	540	55.5	1040	6
Advanced Vehicle Concepts	Quingo Compact [without basket]	5	1000	540	55.5	1040	6
Bischoff & Bischoff	Agil	3	1130	550	42	2000	n/a
Days Healthcare	ST1	4	990	505	46	1270	8
Days Healthcare	ST2	4	990	505	50	1270	8
Days Healthcare	ST3	4	970	520	56	1270	8
Drive Medical	Kite 3 Wheel	3	965	480	40	915	<6
Drive Medical	Kite 4 Wheel	4	965	480	45	1345	<6
Drive Medical	Prism 3	3	950	470	42.3	858	<6



Carriage of mobility scooters on public transport – research findings

Drive Medical	Prism 4	4	1040	480	46.8	1200	<6
Drive Medical	Prism Sport	4	1040	550	52	1475	<8
Drive Medical	Rio Lite*	3	990	550	36.9	770	8
Drive Medical	Scout	4	1080	480	44	1400	<6
Electric Mobility	Liteway 4	4	1040	550	48	1140	8
Electric Mobility	Liteway 4 Plus	4	1050	550	56	1140	8
Electric Mobility	Liteway 6	4	1200	590	63.6	1830	8
Electric Mobility	Liteway 8	4	1200	590	82	1830	8
Electric Mobility	Liteway Balance	3	1060	600	52.1	1180	8
Electric Mobility	Liteway Balance Plus	3	1067	600	54	1180	8
Electric Mobility	Micro Balance	3	980	520	39.7	975	6
Electric Mobility	Rascal 600B*	3	1170	635	92.3	1030	10
Electric Mobility	Rascal Balance*	3	1170	640	92	1070	10
Electric Mobility	Rascal Eco 3*	3	1000	560	42	n/a	6
Electric Mobility	Rascal Eco 4*	4	1000	560	45	1190	6
Electric Mobility	Rascal Partner	4	1180	600	47.7	1800	8
Electric Mobility	Rascal Partner (deluxe)	4	1118	600	53.5	1380	8
Electric Mobility	Rascal Partner (standard)	4	1118	600	47.7	1380	8
Electric Mobility	Ultralite 355XL	4	1190	520	40	985	6
Electric Mobility	Ultralite 380*	3	960	510	37	n/a	6
Electric Mobility	Ultralite 480	4	1020	510	41	1135	6
Freerider	Ascot 4	4	1030	510	50	1080	10



Carriage of mobility scooters on public transport – research findings

Freerider	Knightsbridge 3S	3	1150	615	75	960	10
Freerider	Luggie	4	1000	455	23.5	900	6
Freerider	Luggie Elite	4	1000	510	23.5	900	6
Freerider	Mayfair	4	1190	610	70	1070	8
Freerider	Mini Ranger	4	990	510	50	1150	6
Heartway	PT3 Nomad 3	3	1100	600	54	940	10
Heartway	S11 Zen	4	1070	580	58	1260	10
Heartway	S33 Picnic	3	1040	535	40	860	10
Heartway	S34 Pixi	4	995	490	44	1450	10
Invacare	Lynx	4	1010	505	49.3	1270	8
Kudos	AutoGo	4	1070	550	90	890	12
Kudos	Megalite 4	4	1070	560	56	2130	8
Kudos	Megalite 6	4	1200	590	63.6	1565	8
Kudos	Megalite 8	4	1200	590	82	1565	8
Kudos	Megalite EQ	4	1040	560	53	1660	8
Kymco	Micro	4	980	470	42	1100	8
Kymco	Mini E	4	1080	520	54	1220	8
Kymco	Mini LS	4	1080	520	54	1220	8
Kymco	Mini S*	4	1080	520	54	1220	8
Monarch	Hooter Scooter	4	1100	580	34.9	1250	8
Monarch	Mini 4	4	950	470	42.3	1200	8
Monarch	Mini-Lite	4	1040	560	48.4	1200	8
Monarch	Minx	4	1020	500	31.5	1170	8
Monarch	Mobie	4	990	450	23	1180	8
Monarch	Sunrunner 3	3	1000	560	45	1000	8



Carriage of mobility scooters on public transport – research findings

Monarch	Superlite	4	1040	560	40	1200	8
One Rehab	Aerolite	4	1020	500	41.5	1170	n/a
One Rehab	Aerolite Plus	4	1020	500	39.3	1170	n/a
One Rehab	Komfi-Rider 6000 Deluxe	4	1175	565	79	1500	12
Pride Mobility	Colt Deluxe	4	1194	560	100.9	1333.5	6
Pride Mobility	Colt ES10	4	1194	572	68.6	1321	6
Pride Mobility	Colt Nine	4	1143	560	80.5	1308	6
Pride Mobility	Colt Plus	4	1190	560	92	1370	6
Pride Mobility	Colt Sport	4	1194	657	90	1334	6
Pride Mobility	Colt Twin	4	1160	560	92	1067	6
Pride Mobility	Go-Go Elite Traveller (3W) (17 Amp)	3	946	495	65.8	838	6
Pride Mobility	Go-Go Elite Traveller (3W) (12 Amp)	3	946	495	56.6	838	6
Pride Mobility	Go-Go Elite Traveller 4 (12 Amp)	4	1003	495	56.8	1120	6
Pride Mobility	Go-Go Elite Traveller 4 (17 Amp)	4	1003	495	66	1120	6



Carriage of mobility scooters on public transport – research findings

Pride Mobility	Go-Go Elite Traveller LX (12 Amp)	4	1003	495	53.5	1120	6
Pride Mobility	Go-Go Elite Traveller LX (17 Amp)	4	1003	495	62.6	1120	6
Pride Mobility	Go-Go Elite Traveller Plus (3W)	3	1016	537	65.8	876	6
Pride Mobility	Go-Go Elite Traveller Plus (4W)	4	1025	537	66	1162	6
Pride Mobility	Go-Go Elite Traveller Sport	4	1092	540	70	1283	6
Pride Mobility	Go-Go ES 8 (12 Amp)	4	1022	495	49.6	1086	6
Pro Rider	Easy Fold	4	1118	559	39	1670	6
Pro Rider	Elite Portable	4	1016	508	34	1850	6
Pro Rider	Freedom	4	1041	559	34	1620	6
Repow	Explorer	4	1100	500	45.2	1400	n/a
Roma Medical	Altea 4*	4	1000	550	32	1100	6
Roma Medical	Cameo 3*	3	950	560	43	940	6
Roma Medical	Cameo 4*	4	1000	560	43	940	6
Roma Medical	Paris	4	1050	560	56	1150	8



Carriage of mobility scooters on public transport – research findings

Roma Medical	Sorrento	4	1200	580	85	1430	8
Roma Medical	Sovereign 3	3	1150	600	79	1000	8
Roma Medical	Valencia	4	1170	585	75	1330	8
Roma Medical	Vegas	4	1050	570	46	940	6
Roma Medical	Whisper	3	940-1020	430	39	1000-1200	6
Sunrise Medical	Sterling Little Gem 2	4	980	510	40	1150	9
Sunrise Medical	Sterling Little Star	4	960	500	35	1100	6
Sunrise Medical	Sterling Pearl	4	1030	560	52	1170	8
TGA	Buddy	3	1100	610	36	780	7.4
TGA	Eclipse [heavy duty battery]	4	1000	480	55	1100	6.8
TGA	Eclipse [standard battery]	4	1000	480	45	1100	6.8
TGA	Superlight RWD [heavy duty battery]	3	1140	620	64	750	7.4
TGA	Superlight RWD [standard battery]	3	1140	620	54	750	7.4
Van Os Medical	Travelux Boost 3	3	1020	540	45.5	860	6 (w/135kg load)
Van Os Medical	Travelux Boost 4	4	1020	540	45.5	860	6 (w/135kg load)
Van Os Medical	Travelux Zoom	3	1050	590	57	950	6 (w/135kg load)
Van Os Medical	Travelux Zoom 4	4	1050	590	57	950	6 (w/135kg load)

Appendix 3: People and organisations consulted

Consumers

- Mobility scooter users (c. 20 individuals)

Organisations

- Assist UK
- Association of Train Operating Companies (ATOC)
- British Healthcare Trades Association
- British Standards Institute
- Confederation of Passenger Transport UK (CPT)
- Disabled Living Foundation
- Motability Operations
- Passenger Focus
- Transport for London
- Which?

Scooter retailers

- Handicare
- Parkgate Mobility
- London Mobility

Scooter manufacturers

- Electric Mobility
- Sunrise Medical

Train operating companies

- Arriva Trains Wales
- c2c
- CrossCountry
- Chiltern Railways
- East Coast

- East Midlands
- First Capital Connect
- First Great Western
- First Hull
- First TransPennine Express
- Greater Anglia Heathrow Express
- London Midland
- London Overground
- Merseyrail
- Northern Rail
- ScotRail
- South West Trains
- Southeastern
- Southern
- Virgin

Tram operators

- Blackpool Tramway
- London Tramlink
- Manchester Metrolink
- Midland Metro
- NET
- Supertram
- Nexus

Bus operators

- FirstGroup
- Stagecoach Bus (South Yorkshire)
- Thamesdown Transport