

# PAS 900:2010

## Code of practice for wheelchair passport schemes



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# Foreword

This Publicly Available Specification (PAS) has been developed by Essex County Council, Lincolnshire County Council and Unwin Safety Systems in collaboration with the British Standards Institution (BSI).

Acknowledgement is given to the following organizations that were involved in the development of this specification.

- British Healthcare Trades Association (BHTA)
- British Red Cross
- Chartered Society of Physiotherapy
- Community Transport Association (CTA)
- Department for Transport
- Dial a Ride – Transport for London
- Empower
- Rehabilitation Engineering Division, Kings College Hospital Foundation Trust

## Use of this document

As a code of practice, this PAS takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this PAS is expected to be able to justify any course of action that deviates from its recommendations.



## Presentational conventions

The provisions in this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

## Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**



# 0 Introduction



## 0.1 Transport and social inclusion

Living with a disability can provide many challenges to individuals, their families and carers throughout their everyday lives. In these circumstances a wheelchair may be beneficial to assist with mobility. The design and function of a wheelchair and seating system, however, will vary widely depending on the age, needs and physical characteristics of the user and carers.

Historically, the primary functions of a wheelchair have been based on a user's clinical need, comfort, postural support and general mobility. To act as a seat in a motor vehicle is an additional consideration to be addressed by wheelchair manufacturers and equipment prescribers when taking into account the user's many differing social needs.

Greater freedom of mobility and access to safe transport lies at the heart of many day-to-day activities for all members of society. Similarly, safe transport for wheelchair users is a key element in an individual's ability to access medical facilities as well as participate in education, work and leisure.

Presenting essential information for wheelchair securement and needs of the wheelchair seated passenger to transport providers in a clear manner with a common method of operation will not only reduce risks associated with travel but enable greater confidence for the passenger, their carers and families in the achievement of social inclusion.

## 0.2 What is a wheelchair passport?

A wheelchair passport is a means to relay key information to transport providers, drivers and passenger assistants. It relates to the provision of safer transport of individual wheelchair seated passengers travelling in road vehicles and will present the information in a consistent way so as to be easily accessible.

Each person directly involved in the provision of equipment for use in transport, be they the wheelchair prescriber, the user and/or their carer or escort, a transport manager, a vehicle driver and their assistant, need to act together to create access to the information required to maximize the safety of wheelchair seated passengers.

The passport is intended to be attached to a wheelchair and designed to hold pertinent details, presented in an easy-to-read, safe, reliable and durable format. The extent of information supplied will depend on the complexity of the individual's disability.

## 0.3 Passport scheme application

PAS 900 is intended to be employed in transport operations where a risk assessment of individual passenger needs in transport has taken place as part of an overall risk management process. It is intended to be used in harmony with other risk assessment processes that may already be in place, for example,

where a wheelchair user is a pupil/student attending school/college it is likely that relevant information about their special needs will already be available within local authorities. In this case, communication with the Children's Services department would ensure a joined-up approach and the sharing of information about safer transport.

The term 'passport' has been adopted, and it has been noted that the term has connotations of cross-boundary freedom of movement. Whilst the intention of PAS 900 is to provide guidelines for passport schemes operated on a local basis, it is hoped the extensive adoption of the scheme across the UK would facilitate easier and safer travel.

By its manner of operation, PAS 900 intends to unite the skills and disciplines of stakeholders in the provision of wheelchairs and their use in a transport environment.

## 0.4 Implementation and roll-out

The implementation of PAS 900 is intended to provide enhanced risk control for all wheelchair seated passengers. However, the advantages in the delivery of clear information and instruction to drivers and their assistants will be at a maximum where the complexity of needs of a passenger is higher. It is therefore envisaged that the roll-out of the scheme would initially be most beneficial for passengers with more complex needs before the eventual introduction for all wheelchair seated passengers.



## 1 Scope

This Publicly Available Specification (PAS) gives recommendations for the provision and operation of systems to present essential information required by wheelchair users, their carers, vehicle drivers and their assistants, for the safer transport of wheelchair seated passengers in a road vehicle.

**NOTE 1** *These guidelines are intended to operate in conjunction with contracted transport providers operating risk assessment procedures as part of an overall risk management process.*

**NOTE 2** *Whilst the information provided by the scheme may be relevant, it would not provide a wheelchair user the right to travel on public transport.*



## 2 Terms and definitions

For the purposes of this PAS, the following terms and definitions apply.

### 2.1 add-on components

hardware that is attached to the wheelchair frame subsequent to sale by the wheelchair manufacturer, in order to enhance design and/or performance of the wheelchair

**NOTE** *Tools may be required to fit or remove add-on components, for example, seat back extensions, trays, spoke guards, head supports and oxygen cylinder carrier.*

### 2.2 anchorage

assembly of components and fittings by which loads are transferred directly from the wheelchair tie-down to the vehicle, or from the occupant restraint to the vehicle, wheelchair, wheelchair tie-down, or vehicle interior component

### 2.3 boarding aid

devices intended to facilitate access or exit of persons to and from a vehicle

### 2.4 driver

individual who drives the passenger vehicle

**NOTE** *The driver has overall responsibility for all matters regarding the safety of passengers.*

### 2.5 forward-facing

orientation in which the wheelchair-seated passenger faces the front of the vehicle with the wheelchair reference plane within ten degrees of the longitudinal axis of the vehicle

### 2.6 four-point tie-down

wheelchair tie-down system that attaches to the wheelchair frame at four separate securement points and also attaches to the vehicle at four separate anchorages

## 2.7 harm

physical injury or damage to the health of people, or damage to property or the environment

## 2.8 hazard

potential source of harm

## 2.9 head support

device attached to a wheelchair or seating system, used to position or accommodate the user's head

*NOTE A head support is not the same as a head restraint, which is a device whose purpose is to limit the rearward displacement of an adult user's head in relation to his torso in order to reduce the danger of injury to the cervical vertebrae in the event of an accident.*

## 2.10 occupant restraint

assembly of webbing and hardware intended to restrain a vehicle occupant during normal vehicle movement or an impact in order to prevent ejection, and prevent or minimize contact with the vehicle interior components and other occupants

## 2.11 passenger assistant

person or persons who assist the driver with the safety of vehicle passengers

## 2.12 passport

document attached to a wheelchair, containing key instructions and information regarding provisions for the needs of an individual and their wheelchair in transport

## 2.13 passenger lift

vehicle boarding aid consisting of a platform that can be mechanically raised or lowered, connecting different levels between the ground and vehicle

## 2.14 pelvic-belt restraint lap-belt restraint

assembly of webbing and hardware, positioned across the lap, intended to maintain an occupant in a seat during a crash by transfer of forces through the pelvis

## 2.15 postural support device

component used to support a person in a desired seated position, but is not intended to provide occupant restraint in a vehicle impact

## 2.16 prescriber

trained professional who gives directions for the allocation of a suitable wheelchair, or wheelchair and seating system combination, to suit the needs of a person with disability

## 2.17 ramp

a vehicle boarding aid consisting of an inclined surface connecting different levels between the ground and vehicle

## 2.18 rearward facing

orientation in which the wheelchair-seated passenger faces the rear of the vehicle with the wheelchair reference plane within ten degrees of the longitudinal axis of the vehicle

## 2.19 securement point

point on the wheelchair to which wheelchair tie-downs are connected

## 2.20 shoulder-belt restraint upper torso restraint

assembly of webbing and hardware intended to limit movement of the head and chest during a crash by application of restraint forces to either or both clavicles

## 2.21 three-point restraint

occupant restraint assembly with three anchorages comprised of both a pelvic-belt restraint and a diagonal shoulder-belt restraint that connect together near the hip of the occupant

## 2.22 transfer

action where a wheelchair user will move from their wheelchair to a vehicle seat



### 2.23 transport commissioner

person or organization that has the authority to request or procure the provision of transport services

### 2.24 transport operator

individual or group of individuals who provide accessible transport services for the carriage of passengers

*NOTE Operators may function either as a for profit or not for profit basis.*

### 2.25 tilt

type of wheelchair seat design that allows the complete seat structure to rotate in the wheelchair reference plane relative to and about an axis located on the wheelchair base

*NOTE Previously referred to as 'tilt in space'.*

### 2.26 wheelchair footprint

space outlined on the horizontal wheelchair ground plane by projecting vertically down from the outermost edges of the structural members that comprise the mobile base and seat of the wheelchair

### 2.27 wheelchair user

individual seated in a wheelchair

### 2.28 wheelchair tie-down wheelchair securement

device or system designed to secure a wheelchair in place in a motor vehicle

### 2.29 wheelchair tie-down and occupant restraint system (WTORS)

complete restraint system for wheelchair-seated passengers comprised of equipment for wheelchair tie-down and a belt-type occupant restraint



## 3 Operational framework

### 3.1 Wheelchair passport creation

#### 3.1.1 General

**3.1.1.1** The transport commissioner, working in conjunction with the transport operator, should ensure that a wheelchair passport is created for each user, with information gathered from relevant stakeholders (see 3.1.2 to 3.1.4).

**3.1.1.2** Transport commissioners and transport operators should ensure that a full risk assessment covering wheelchair users, other passengers and transport staff is carried out before transport services are undertaken.

**NOTE 1** A suitable transport risk assessment template is given in Annex A.

**NOTE 2** Attention is drawn to legislation, including The Road Traffic Act (1988 and amended 1991) [1] and the Road Vehicles (Construction and Use) Regulations (1986) [2].

**NOTE 3** Transport operators frequently operate with a driver and a passenger assistant working together closely as a team to focus on particular tasks of transport operations. It is by acting as a team, sharing tasks and responsibilities that will allow the driver to focus his attention on control of the vehicle and ensure the safety and comfort for all passengers. This approach is preferable although not essential.

#### 3.1.2 Information from the wheelchair user

The following should be obtained from the wheelchair user, or an individual acting on their behalf:

a) specific requirements relating to their transportation;

**NOTE** User requirements do not automatically override manufacturer's recommended use.

b) in circumstances where a user is unable to use an occupant restraint due to their condition, an exemption certificate that has been issued by their GP.

**NOTE** When an exemption certificate has been issued additional risk control measures will be necessary to ensure the safety of the user and other passengers travelling in the vehicle. The need for such consideration will be highlighted when completing the risk assessment given in Annex A.

#### 3.1.3 Information from the wheelchair and seating prescriber

The following should be obtained from the wheelchair and/or seating prescriber:

- a) details of the final prescription and any other recommendations;
- b) confirmation that the user has been provided with a wheelchair that addresses their clinical, functional and lifestyle requirements;
- c) confirmation that the prescription process has involved consultation with occupational therapists, rehabilitation engineers, clinical scientists, physiotherapists, rehabilitation consultants, wheelchair services or private retailer organizations, as required;

d) confirmation that the following have been considered during the prescription process:

- all forms of probable usage;
- manufacturer statements of suitability for use in transport;
- limitations of use;
- warnings that apply whilst used in transport;
- wheelchair and seating system stability when occupied;
- the use of postural support devices;
- the use of communication devices;
- requirement for special tie-down equipment;
- the need for heavy add-on components.

**NOTE** Postural support devices may include belts, thoracic pads, trays, knee blocks, pommels or foot straps.

e) where a departure from the manufacturer's instructions for use is required due to a user's specific clinical need, demonstration that a risk management process has been implemented to reduce risks to an acceptable level, with consideration given to the benefits of travel;

f) confirmation that they have provided the user or the user's carer with operational instructions for use and warnings about limitations where required.

**NOTE** This is especially important when a piece of equipment or combination of pieces of equipment departs from manufacturer's instructions for use.

#### 3.1.4 Information from the wheelchair and seating manufacturer

**NOTE** Attention is drawn to The Medical Devices Regulations 2002 [3].

The following should be obtained from the wheelchair and seating manufacturer:

- a) Instructions for use, which include:
  - the seating orientation of the wheelchair;
  - the maximum weight of the wheelchair, including add-ons;
  - what types of add-on components are compatible;
  - the generic type of tie-down, including the rated capacity of the tie-downs used;
  - images of securement point locations on the wheelchair.
- b) Information on the use and attachment of postural support devices such as a head support, thoracic or pelvic supports, knee blocks and foot straps.
- c) Labelling of securement point locations.
- d) Confirmation that the interface mechanism between the seating unit and the host wheelchair is capable of sustaining loads created by a crash event.

## 3.2 Roles, responsibilities and skills

### 3.2.1 General

All tasks associated with the supply of wheelchairs and seating systems and the provision of transport services should be conducted by competent and experienced personnel.

### 3.2.2 Wheelchair users

Transport commissioners should ensure that the wheelchair user, or a responsible person acting on their behalf, is aware that they are responsible for ensuring that their wheelchair:

- a) receives regular maintenance checks and that any faults are reported to a repair agent for rectification; and

*NOTE These checks may include, but are not limited to, tyre inflation, component attachment, frame integrity and brake functionality.*

- b) is correctly maintained for safe use in transport in accordance with the manufacturer's guidelines.



### 3.2.3 Wheelchair and seating equipment prescribers

**3.2.3.1** Wheelchair and seating prescribers involved in the creation of the wheelchair passport should demonstrate awareness of all aspects of the risks involved with the prescription and provision of equipment.

*NOTE It will not always be sufficient to know whether a wheelchair has been passed as suitable for use in transport, but to be aware of the risks involved with the provision of seating and other add-on components.*

**3.2.3.2** Wheelchair and seating prescribers should demonstrate that a risk assessment of individual components of a prescription have been undertaken.

*NOTE 1 Head supports not normally passed for use in transport, for example, may have benefits to the user that out-weigh the risk for use in transport. Awareness that risk consideration is not just for the user but also for other users of the vehicle is important.*

*NOTE 2 See Annex A for an example of a suitable risk assessment.*

### 3.2.4 Transport operators, drivers and passengers assistants

**3.2.4.1** Transport commissioners should ensure that transport operators are aware that they are responsible for the safety of the wheelchair user throughout their journey, and while:

- a) siting the vehicle in a location suitable for safe boarding;
- b) ensuring as far as possible the safe transit of the wheelchair user to and from the vehicle;
- c) boarding and alighting the vehicle using ramps or passenger lifts;
- d) securing the wheelchair;
- e) fitting a user restraint system; and
- f) storing user's luggage and items removed from the wheelchair, e.g. oxygen cylinders.

**3.2.4.2** All drivers and passenger assistants employed by the designated transport operator should have:

- disability awareness experience or training;
- approval from a safeguarding authority;
- knowledge/training in conflict resolution;
- knowledge/training in emergency egress;
- knowledge of manual operation of powered equipment, such as passenger lifts, ramps and doors.

*NOTE Training schemes such as CTA MiDAS or PATS or equivalent are acceptable.*

**3.2.4.3** All drivers and passenger assistants employed by the designated transport operator should have completed training in the use and operation of vehicle

passenger lifts/ramps, wheelchair tie-downs and occupant restraint systems.

**3.2.4.4** Any individual performing a risk assessment prior to transport commencing should be competent.

*NOTE Competency may be demonstrated by a qualification from a recognized professional body to an appropriate level such as a Chartered Institute of Environment Health Level II Certificate in Risk Assessment.*

**3.2.4.5** Any transport operator that has been commissioned should have procedures in place to deal with:

- passenger medical emergencies;
- vehicle breakdown;
- vehicle collision;
- on-board power failure;
- reporting of road traffic incidents;
- reporting of adverse incidents involving wheelchairs;
- reporting of perceived defects with wheelchairs and tie-down equipment.

## 3.3 Inter-agency working

**3.3.1** There should be clear and comprehensive communication between all stakeholders.

*NOTE Stakeholders include:*

- the wheelchair user and their carer;
- the wheelchair manufacturer and seating system manufacturer;
- the wheelchair prescribing clinician;
- the wheelchair tie-down and occupant restraint system manufacturer;
- private retail organizations;
- the transport commissioner;
- the transport operator;
- the education authority, for a child with special educational needs.

**3.3.2** Stakeholders should work together to identify:

- a) the specific needs of the user;
- b) the limitations of prescribed equipment;
- c) available and suitable vehicle facilities;
- d) any need for specific personnel training;
- e) the existence of MHRA field safety notices or medical device alerts relating to a wheelchair.

## 4 Risk considerations and awareness

### 4.1 General

The recommendations outlined in 4.2 to 4.4 should be considered when conducting the transport risk assessment (see 3.1.2). If any of these recommendations can not be followed, justification should be provided in the risk assessment documentation.

### 4.2 Vehicle seat transfer

**4.2.1** A wheelchair user should transfer from their wheelchair to a vehicle seat if they can do so independently and without causing pain or discomfort and they are able to use the vehicle seat belt provided.

**4.2.2** In cases where the user has transferred to a vehicle seat, their wheelchair should be secured as an item of luggage in a designated area, ensuring that gangways and access to exits are not obstructed in any way.

*NOTE Four-point tie-downs may be used to secure an unoccupied wheelchair.*

### 4.3 Wheelchair seated passengers

**4.3.1** Transport commissioners and transport operators should seek to provide the highest level of safety for wheelchair seated passengers.

**4.3.2** When a wheelchair is used in a standard format, manufacturer's instructions for use in transport, as provided in the user manual, should be followed.

**4.3.3** Occupant restraint systems should be fitted to the following specifications:

a) the lap belt should be routed through the wheelchair or seating system so that the lap section fits low on the pelvis of the user to avoid the risk of abdominal intrusion;

*NOTE Gaps in seating systems will enable preferred lap belt routing on the pelvis of a user.*

b) lap belt anchorages should be positioned as close as possible to the rear of the wheelchair to achieve a steep angle of application;

*NOTE Optimum lap belt angle, when viewed from the side, should be in the range of 45° to 70° from the horizontal.*

c) the upper anchorage or effective upper anchorage of a 3-point restraint system should be situated behind the user at or above their shoulder height;

d) the shoulder belt section of an occupant restraint system should be routed in such a manner as to lay on the load bearing parts of the user's upper torso.

**4.3.4** Wheelchair tie-downs should have a rated capacity capable of securing the mass of the unoccupied wheelchair.

*NOTE Wheelchairs and seating systems with integrated occupant restraints will impart additional loads to a tie-down system.*

**4.3.5** Wheelchair tie-downs and occupant restraint systems should be inspected regularly following manufacturers' maintenance instructions.

*NOTE Equipment will usually be considered for replacement after a five year period, depending on the intensity of usage.*

**4.3.6** Vehicle anchorage systems should be checked for:

- compatibility with tie-down fittings;
- dirt ingress preventing effective engagement;
- local damage or wear preventing effective engagement.

### 4.4 Entry and egress

**4.4.1** Drivers and passenger assistants should be trained in the correct use of boarding aids such as a passenger lift or ramp.

**4.4.1.1** Training in the use of boarding aids should cover use in both normal and emergency situations.

**4.4.1.2** Training should include the operation of powered equipment in case of a power failure.

**4.4.2** When possible, drivers or passenger assistants should accompany passengers on the lift or ramp without exceeding the load capacity.

## 5 Information for the wheelchair passport

**NOTE 1** Whilst it is desirable to collect as much detail as possible relevant to the passenger and their transport needs, confidentiality and identity protection for the more vulnerable individuals will need to be preserved.

**NOTE 2** Attention is drawn to the Data Protection Act 1998 [4].

**NOTE 3** Annex B contains an example passport template.

### 5.1 General

**5.1.1** Only information relevant to the specific wheelchair seated passenger should be included on the passport.

**NOTE** In cases where wheelchair seated passenger needs are less complex, some information may not be required.

**5.1.2** Information should be made available to the transport operator before a user starts using a transport service to reduce last minute problems occurring at the vehicle.

**NOTE** This will highlight the need for increased space for the wheelchair, storage space or luggage straps. It also enables the operator to advise the user/Prescriber of any space restrictions that could limit the transportation of wheelchairs.

**5.1.3** Informed consent should be sought from the user or a responsible person acting on behalf of the user before any information is collected.

**5.1.4** Passports should contain a date at which time a review should be conducted. The passport should be replaced when the wheelchair user's needs and equipment change.

**5.1.5** Passports should contain details of who created the passport.

### 5.2 Wheelchair user information

#### 5.2.1 Personal information

**5.2.1.1** The passport should contain a unique means of identification for the passenger

**NOTE 1** This is usually in the form of a reference number in order to protect the user.

**NOTE 2** A user's name, or how they wish to be referred to, can be included with the consent of the user or their carer.

**5.2.1.2** The passport should contain information regarding the user's:

- ability to transfer to a vehicle seat;
- preferred seating orientation (subject to the outcome of the risk assessment);
- preferred location in vehicle;
- kerb climbing limitation of the wheelchair seated user.

**5.2.1.3** Any additional medical information should only be included with the user or carer's consent.

#### 5.2.2 Medical emergency information

**5.2.2.1** The passport should include details of the user's dependence on medical devices either attached to their wheelchair or vehicle mounted, whilst in transport.

**NOTE** Dependence on medical devices attached to a wheelchair will require additional risk control measures to reduce the risk of injury to the user and other passengers travelling in the vehicle. The need for such consideration will be highlighted when completing the hazard checklist given in A.3.

**5.2.2.2** The passport should include details of actions and who to contact in an emergency.

#### 5.2.3 Passenger protection

**NOTE** Attention is drawn to the Protection of Vulnerable Adults under the Care Standards Act 2000 (POVA) [5] and The Protection of Children Act 1999 (POCA) [6].

### 5.3 Wheelchair and seating information

#### 5.3.1 Wheelchair information

The passport should include the following information:

- a) the wheelchair make, model and serial number;
- b) whether the wheelchair is recommended for use in a motor vehicle;

**NOTE** If the wheelchair and associated seating, including add on components, is not recommended by the manufacturer as suitable for use in transport then personnel conducting risk assessment will be required to provide clear instructions on the means to secure the wheelchair and routing of the occupant restraint system.

- c) seating orientation of the wheelchair, forward or rearward facing;

- d) combined weight of wheelchair, seating and user;
- e) the generic type of wheelchair securement system to be used;
- f) the required rated load capacity for tie-downs;
- g) the location of tie-down points on the wheelchair front and rear;
- h) agreed seat tilt and recline angles;  
*NOTE Agreed settings will be achieved by the process of risk management.*
- i) how to turn off the control system to prevent accidental operation of a powered wheelchair;
- j) whether a head support required during transport;
- k) whether a tray required during transport;
- l) whether a communication aid to be used during transport;
- m) wheelchair safe slope rating;
- n) any requirements for stowage of removable items/accessories during transport;
- o) occupant restraint system requirements.

### 5.3.2 Seating system

The passport should include the following information:

- a) whether the seating system is suitable for use in transport;  
*NOTE 1 If the wheelchair and associated seating, including add on components, is not recommended by the manufacturer as suitable for use in transport then personnel conducting risk assessment will be required to provide clear instructions on the means to secure the wheelchair and routing of the occupant restraint system.*
- b) seating orientation, forward or rearward facing;
- c) agreed seat tilt and recline angles;  
*NOTE 2 Agreed settings will be achieved by the process of risk management,*
- d) the need for changes in the position of postural support devices;
- e) the need for removal of any device e.g. a tray, pommel or knee block;
- f) the need for changes to the adjustment of webbing type postural belts.



## 5.4 Transport requirements

### 5.4.1 Vehicle entry/exit lifts/ramps

The passport should contain the following information.

- Minimum passenger lift capacity required;
- Minimum passenger lift dimensions required;
- Whether a passenger assistant is needed to ride on passenger lift;
- Maximum ramp angle permitted;
- Kerb climbing limitations of the wheelchair and/or user.

### 5.4.2 Tie-down information

The passport should contain the following information:

- wheelchair manufacturer recommended tie-down;
- generic type of tie-down;
- tie-down rated capacity;
- preferred end fittings;
- specific system/special application;
- images of tie-down location.

### 5.4.3 In-vehicle spatial requirements

The passport should detail the size of the wheelchair footprint and the additional space required for the

correct fitment of wheelchair tie-downs and occupant restraints.

### 5.4.4 Additional information

The passport should relay any additional information required for the care of the user.

*NOTE These will often relate to the specific clinical needs of the user and may include the operational requirements and use of medical devices attached to the wheelchair and seating system and may include any additional relevant comments.*

## 5.5 Storage of information

A secure information management system should be employed to manage user data.

*NOTE 1 Attention is drawn to the Data Protection Act 1998[4].*

*NOTE 2 See Clause 5 NOTE 1.*

*NOTE 3 Various software systems are available that lend themselves suitable for this application.*





## 6 Passport design

### 6.1 Layout

**6.1.1** The layout of a wheelchair passport should be structured in a manner that is capable of conveying basic or common information required for all wheelchair seated passengers, as well as information of a more detailed nature if the needs of the wheelchair seated passenger demand.

**6.1.2** Common information should be presented on the first pages of the passport.

*NOTE Common information includes wheelchair passenger coded identity, wheelchair type, combined mass of wheelchair and user, seating orientation, tie-down type and occupant restraint system type and emergency contact details.*

**6.1.3** The specific detailed requirements of the wheelchair seated passenger should follow the common information.

*NOTE Detailed requirements include the need for additional tie-down space, the settings of adjustable elements of the wheelchair and the use of postural support devices such as a tray or head support or knee block/pommel.*

**6.1.4** Information of a sensitive or secure nature should not automatically be included on the passport.

*NOTE 1 Sensitive or secure information may be presented to transport operators in the form of a confidential travel plan held elsewhere in the vehicle prepared as part of a risk management process.*

*NOTE 2 Sensitive or secure information may include any medication required or a home address.*



### 6.2 Durability

**6.2.1** The passport should be waterproof.

**6.2.2** The passport should be of sufficient strength that it cannot be torn easily.

### 6.3 Accessibility

*NOTE For further information about the accessible design of documents see the RNIB website [www.rnib.org.uk](http://www.rnib.org.uk).*

**6.3.1** The size and font used should be chosen with due consideration to the ease of reading.

**6.3.2** If colour is being used, the contrast of colours should be such that the text is still clearly legible on the background.

### 6.4 Use of images

**6.4.1** Pictorial representations should be used in addition to any instructions.

**6.4.2** Any photographs used should be of a high resolution and scaled to a consistent ratio.

**6.4.3** Any images used on the passport should not contain identifiable faces.

### 6.5 Mounting

The passport should be mounted on the wheelchair in a clear and accessible place.

### 6.6 Replacement

Lost and damaged passports should be able to be replaced quickly at low cost.

## Annex A (informative) Generic risk assessment template

### A.1 General

Transport operators, drivers and passenger assistants have responsibility for the safety of a wide range of special needs passengers, each with their individual requirements. Wheelchair seated passengers may be exposed to sources of harm that would not normally occur for passengers who use a vehicle seat.

It is by the application of risk assessment that risks can be controlled and reduced to acceptable levels when balanced against the benefits that travel will offer the passenger.

Effective risk management, therefore, will require appropriate skills which employ experience, insight and judgement in a systematic manner to manage the various risks associated with transport.

There are three main subjects to consider during the risk assessment process:

- a) the wheelchair user;
- b) the wheelchair and seating system;
- c) transport considerations.



## A.2 Passenger and risk assessment coordinator identification

The risk assessment documentation should record, as a minimum:

- passenger identity;
- passenger reference;
- coordinator identity;
- purpose of the transport;
- vehicle category, e.g. M1, M2 or M3;
- type of transport;
- wheelchair details;
- date of review;
- date of next review.

An example of a format is given in Table A.1.

**Table A.1** – Passenger and risk assessment coordinator information

Passenger		Risk assessment coordinator										
Name		Name										
Date of birth	DD MM YYYY	Transport department										
Address		Contact details										
Passenger reference		<table border="1"> <thead> <tr> <th>Transport purpose</th> <th>Vehicle types</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Home to School/College</td> <td><input type="checkbox"/> M1<sup>1)</sup> Car/taxi</td> </tr> <tr> <td><input type="checkbox"/> Day centre</td> <td><input type="checkbox"/> M2 Minibus</td> </tr> <tr> <td><input type="checkbox"/> Work</td> <td><input type="checkbox"/> M3 Bus</td> </tr> <tr> <td><input type="checkbox"/> Medical access</td> <td></td> </tr> </tbody> </table>	Transport purpose	Vehicle types	<input type="checkbox"/> Home to School/College	<input type="checkbox"/> M1 <sup>1)</sup> Car/taxi	<input type="checkbox"/> Day centre	<input type="checkbox"/> M2 Minibus	<input type="checkbox"/> Work	<input type="checkbox"/> M3 Bus	<input type="checkbox"/> Medical access	
Transport purpose	Vehicle types											
<input type="checkbox"/> Home to School/College	<input type="checkbox"/> M1 <sup>1)</sup> Car/taxi											
<input type="checkbox"/> Day centre	<input type="checkbox"/> M2 Minibus											
<input type="checkbox"/> Work	<input type="checkbox"/> M3 Bus											
<input type="checkbox"/> Medical access												
Date of review	DD MM YYYY	Next review date	DD MM YYYY									
Passenger medical summary												
Ability to transfer												
Wheelchair(s) used												
Seating preferences												
Maximum travel duration												

1) For further definitions of vehicle categories see Directive 2007/46/EC. <http://eur-lex.europa.eu> [7]

### A.3 User hazard checklist

A checklist as given in Table A.2 should be used to assess the risks associated with the user. This part of the assessment contains information of a clinical nature and should therefore involve a prescribing clinician.

This checklist should alert the prescriber of the wheelchair to subjects concerning the medical

condition of the passenger and any effects this may have on the safety of the passenger when in transport, highlighting the need for further actions in provision.

An example of a format is given in Table A.2.

**Table A.2 – User hazard checklist**

Passenger reference		
Do the user's needs raise concerns regarding any of the following?	Further action required	Action detail
1.1 A reclined, oblique, tilted or poorly controlled seating position that could affect occupant restraint?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.2 Poor head control?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.3 Possible musculoskeletal injury?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.4 Require an immediate change of position (seizure)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.5 Any behavioural problems?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.6 The requirement for additional medical devices such as oxygen or need for a ventilator or feeding system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.7 A medical condition affected by transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.8 Has the user been issued with a formal exemption certificate for the use of an occupant restraint system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
1.9 Any other considerations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

  

Conducted by		Date	DD	MM	YYYY
Date of review	DD	MM	YYYY		

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## A.4 Wheelchair/seating hazard checklist

This part of the assessment should be carried out by the prescribing clinician to assess the risks associated with the wheelchair and seating system. It is intended to assist in the selection of suitable equipment according to the medical and transport needs of the user.

The example formats given are in two parts;

- a) wheelchair; and
- b) seating system.

**Table A.3** – Wheelchair and seating hazard checklist

Passenger reference		
2.1 Wheelchair	Further action required	Action detail
2.1.1 Does the wheelchair manufacturer recommended the wheelchair as suitable for use in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.2 Are there any limitations of use of the wheelchair in transport given by the manufacturer?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.3 Is there information given by the manufacturer regarding configuration of the wheelchair when used in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.4 Is there a special tie-down system used to secure the wheelchair?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.5 Does the wheelchair manufacturer recommend types of tie-downs to be used in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.6 Is the wheelchair being used to host a seating system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.7 Has the wheelchair been fitted with add-on components?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.8 Are add-on components approved for use by wheelchair manufacturer?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.9 If add-on components are approved for use by the manufacturer, are there additional instructions for use in transport provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.10 Has the wheelchair been modified in any way?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Table A.3 – Wheelchair and seating hazard checklist (continued)

2.1.11 If the wheelchair has been modified, are there additional instructions for use in transport provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1.12 Is there any wheelchair manufacturer information on the use of a head support whilst in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2 Seating system	Further action required	Action detail
2.2.1 Does the seating system manufacturer recommend it as suitable for use in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.2 Is the seating system compatible for use with the host wheelchair in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.3 Has the interface between seating system and host wheelchair been proven as suitable for use in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.4 Are there any limitations of use given by the manufacturer of the seating system when in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.5 Is there information given by the manufacturer regarding configuration of the seating system when used in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.6 Is there a special tie-down system to be used to secure the combined wheelchair and seating system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.7 Can the wheelchair and seating system be secured with standard 4 point tie-downs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.8 Will it be necessary to provide warnings of the overall stability of the wheelchair with seating system and user?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.9 Does the seating system have postural support devices attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.10 Are webbing type postural belts used to maintain the posture of the passenger?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.11 Will the postural devices or belts impart injurious loads to the user in the event of a minor crash event?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Table A.3 – Wheelchair and seating hazard checklist (continued)

2.2.12 Will the postural devices or belts impart injurious loads to the user in the event of a serious crash event?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.13 Will any form of postural support device need to be removed whilst in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.14 Does the seating system and wheelchair have an integrated crashworthy lap belt attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.15 Will a standard three-point lap and diagonal restraint system be adequate to restrain the user in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.16 Is there a need for additional occupant restraint specification to suit the needs of the user?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.2.17 Is there a need for any additional specific instructions to transport providers regarding the configuration or settings of the wheelchair and seating system when in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Conducted by <input type="text"/>		Date <input type="text" value="DD"/> <input type="text" value="MM"/> <input type="text" value="YYYY"/>



### A.5 Transport hazard checklist

This part of the assessment should be conducted by a suitably qualified and experienced member of the transport operator team (see 3.2.4).

The transport hazard checklist will consider the contributions of all parts of the process in order to determine best possible transport conditions.

**Table A.4** – Transport hazard checklist

Passenger reference		
3.1 Instruction	Outcome	Action detail
3.1.1 Is there a need for driver and assistant instruction regarding the medical needs or behaviour of the passenger?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.1.2 Is there a need for driver and assistant instruction regarding the mechanical settings of the wheelchair and seating system when in transport?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.1.3 Is there a need for driver and assistant instruction regarding the detachment of accessories or add-on components of the wheelchair and seating system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.1.4 Is there a need for the removal of any accessory or add-on components of the wheelchair and seating system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.2 Training	Outcome	Action detail
3.2.1 Is there a need for driver and assistant training in order to deal with the medical or behavioural needs of the passenger?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.2.2 Is there a need for driver and assistant training in order to remove or adjust any add-on item or accessory of the wheelchair?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

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Table A.4 – Transport hazard checklist (continued)

3.3 Vehicle	Outcome	Action detail
3.3.1 Is there a limitation to the type of vehicle that transport of the user will be restricted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.3.2 Is there a need to position the wheelchair and user in a particular location or position within the vehicle in order to achieve effective occupant restraint?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.3.3 Does the user have a preference of seating location within the vehicle?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.4 Entry and egress	Outcome	Action detail
3.4.1 Does the stability of the combined wheelchair, seating system and user generate particular concern?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.4.2 Is there a preferred means of vehicle entry or exit?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.4.3 Is the combined mass of wheelchair, seating system and user within the load capacity of the lift or ramp?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.4.4 Should the passenger assistant ride on the lift platform with the passenger and wheelchair?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.4.5 If the wheelchair is powered, does the wheelchair have the ability to climb over a roll-off barrier?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.5 Wheelchair securement	Outcome	Action detail
3.5.1 Is there a requirement for special tie-down equipment to be used with the wheelchair and seating system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.5.2 Can the wheelchair be secured using a four-point tie-down system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.5.3 Is there a requirement for the rated load bearing capacity of the tie-downs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.5.4 Is there a specified type of tie-down end fitting to be used?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Table A.4 – Transport hazard checklist (continued)

3.6 Occupant restraint	Outcome	Action detail
3.6.1 Are there any particular instructions regarding the type of occupant restraint to be used to restrain the passenger?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.6.2 Is there a need to position the wheelchair and user in a particular location or position within the vehicle in order to achieve effective occupant restraint?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.6.3 Does the wheelchair and seating system have a crashworthy integrated lap belt?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.6.4 Can the passenger be restrained using a three-point lap and diagonal restraint system?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.6.5 Is there a specific requirement to use a three-point restraint system with upper anchorage situated behind the user at or above their shoulder height?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.6.6 Is there a requirement to adjust or remove postural support belts?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

  

Conducted by		Date	DD	MM	YYYY
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## Annex B (informative)

### Passport example

The following example shows a template that may be used for a wheelchair passport.

(Logo of CC or BC or Assessment Body)		Wheelchair make / model	
		Serial number	
		Transportable	
		Combined weight (wheelchair and user)	
		Orientation	
		Tie-down type	
		Tie-down rating	
		Occupant restraint type	
Passenger reference			
Passport review date	DD MM YYYY		
Transfer			
Issued by			
Emergency contact			
Tie-down point – front		Tie-down point – front	
Photo		Photo	
Tie-down point – rear		Tie-down point – rear	
Photo		Photo	

Example wheelchair passport template (continued)

<b>Occupant restraint</b>	<b>Occupant restraint</b>
Photo	Photo
<b>Wheelchair settings</b>	
<b>Tilt angle</b>	
<b>Head support</b>	
<b>Tray</b>	
<b>Foot Straps</b>	
<b>Pommel</b>	
<b>Travel plan</b>	
<b>Safe slope rating</b>	
<b>Maximum kerb climb</b>	
<b>Preferred location</b>	
<b>Maximum ramp angle</b>	
<b>Posture belts</b>	
Photo	Photo
<b>Additional Information</b>	



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[www.dft.gov.uk/transportforyou/access/](http://www.dft.gov.uk/transportforyou/access/)

CTA Midas and PATS Training Material  
[www.ctauk.org/training/](http://www.ctauk.org/training/)

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