

# MOUNTING ELECTRONIC ASSISTIVE TECHNOLOGY TO WHEELCHAIRS

Assessment and Risk Analysis Tool

ISSUE 2.0  
Nov 2006

## **WRAMP Group**

Wheelchair Risk Assessment and Mounting Process Group

User Name:

### **WRAMP GROUP**

The WRAMP Group is composed of staff representing the  
following organisations:

Communication Aid Centre, Frenchay Hospital  
Compass EAT Service, Royal Hospital for Neuro-disability  
Treloar Trust Rehabilitation Engineering Department  
Toby Churchill Ltd  
ACE Centre Advisory Trust  
Access to Communication and Technology

You must read and understand all the guidance notes before using the documentation. If you are not clear on any aspect of this documentation, consult your supervisor or line manager. **Do not carry out wheelchair mounting procedure if you do not feel professionally competent to do so**

## **GUIDANCE NOTES**

1) Please obtain approval for the use of this tool from the relevant Health and Safety Manager for your organisation.

2) This document is a tool intended to assist in the provision of mounting systems to attach communication aids and other EAT devices to wheelchairs. Different parts of the document can be completed at different times in the process of assessing, providing and handing over a mounting system. The document is divided into 3 main parts and 4 appendices as follows:

- Part One – Basic User and Equipment details
- Part Two – Mounting Assessment Checklist
- Part Three – Risk Analysis
- Appendix A – Risk Matrix, for reference
- Appendix B – Stability Testing
- Appendix C – Handover forms (Service and User Copies)
- Appendix D – Questionnaire
- Appendix E – Sample wheelchair supplier Consent letter and form.
- Appendix F – References

3) If there are multiple mounts on a single chair, ie separate mounting systems for a communication aid and for switches, a single assessment and risk analysis document should be completed. If the device will be mounted to more than one wheelchair, then a separate document should be completed for each wheelchair.

4) Part Two, the Mounting Assessment Checklist, is for guidance only and need not necessarily be completed in detail. Part Three, the Risk Assessment, is the main part of the document and **MUST** be completed. 15 commonly occurring risks are listed together with standard management strategies. Each of these 15 risks **MUST** be individually considered and scored. Space is also provided for other identifiable risks for a particular user or situation to be documented and scored.

5) An example of a Risk Matrix scoring system is given and explained further in Appendix A. Please consult your own organisation's risk assessment procedures for other risk matrices that may be used. The risk matrix produces a score based on the likelihood of the event occurring and the severity of consequences to people or equipment if the event occurs.

6) Staff completing this form should have read and be familiar with the MHRA Device Bulletin DB2004(02) Guidance on the Stability of Wheelchairs (March 2004). Staff should also consult the MHRA website at [www.mhra.gov.uk](http://www.mhra.gov.uk) for information regarding Electromagnetic compatibility and other issues related to medical devices [http://ec.europa.eu/enterprise/medical\\_devices/meddev/](http://ec.europa.eu/enterprise/medical_devices/meddev/).

7) Appendix B, Stability Testing, is an optional section provided if stability testing is carried out. This document cannot provide guidance on whether or not stability testing should be carried out in any given case. Please see MHRA Device Bulletin DB2004(02) Guidance on the stability of Wheelchairs for further information or consult your Health and Safety Manager. If stability testing is carried out, there is a risk to users, staff and equipment in carrying out stability testing itself. The stability testing process for each individual establishment should have been risk assessed. Risks will particularly apply to the type of stability testing equipment used and the number of staff recommended to participate in a test.

8) Appendix C service and user copies of a Handover form, provide some standard guidance on the use and management of mounting systems which relate to standard risk management strategies based on providing information to the user and carers. You should also consider whether you need to provide more detailed instructions with photographs, as well as the user manuals of the mounting system and device if applicable. The decision on whether further information is required can only be made on a case by case basis.

9) Appendix D is a questionnaire to assist forward planning of the wheelchair mounting and can be used in conjunction with Part 2. It may be sent to carers/professionals to complete prior to mounting.

10) Appendix E is an example of a letter and form that may be sent to the owner of the wheelchair. This may be a wheelchair service or individual. In most cases it will be the person or organisation that is responsible for paying for the servicing and maintenance of the wheelchair.

11) It is recommended that photographs are taken as part of the documentation of mounting. Please refer to your organisations policy on Clinical Photography and Consent.

**MOUNTING ELECTRONIC ASSISTIVE TECHNOLOGY TO WHEELCHAIRS**

## Assessment and Risk Analysis Tool

*Please be familiar with the guidance notes before using this documentation. Guidance notes should be attached to this document.*

**PART ONE – BASIC USER AND EQUIPMENT DETAILS**

|   |  |
|---|--|
| User Name:<br><br>User Date of Birth:<br><br>User Address:<br><br><br>Date mounting process form started: | Is the weight of the user, the device, the mount and any other accessories within the manufacturers stated weight limit for the wheelchair:<br><br><p style="text-align: center;">YES    <i>BORDERLINE</i>    NO    (circle)</p> <p><b>IF NO, DO NOT MOUNT EQUIPMENT</b></p> If considered borderline, please give details:<br>Weight limit of chair:<br>Current weight of user:<br>Weight of device:<br>Weight of mounting:<br>Weight of other accessories: |
| Name and position of person leading equipment mounting process:   |  |

Questions below need not be completed until after the assessment and completion of Part Two

|   |
|---|
| Make and Model of equipment item(s) to be mounted:  |
| Make and model of wheelchair and any seating system or cushion.<br><br>Is this likely to alter within the next 6 months?  |
| Make and Model of mounting system:  |
| Site of attachment of clamp or bracket to wheelchair frame:   |
| Positions in which the device can be held: (if possible, photos of each position should be attached).   |
| Are modifications required to the frame of the wheelchair in order to fit the mounting system: (Do not carry out invasive modifications, i.e. Drilling welding etc., without referring to the wheelchair provider or manufacturer). |
| Name of wheelchair service or company responsible for ongoing support and maintenance of the chair:   |
| Has permission been sought from the wheelchair service or private company responsible for the maintenance of the wheelchair? If yes, please give brief details of how permission was sought and any response:                       |

**PART TWO: MOUNTING ASSESSMENT CHECKLIST**

*As part of the assessment for mounting a communication aid or other EAT device to a wheelchair, the following should all be considered. **However, these questions are for guidance only and do not necessarily represent all factors that will be relevant for every user.***

| 1. USER PARAMETERS     |  | Notes |
|------------------------|--|-------|
| 1.1                    | Is the user's weight well within the maximum weight allowance for the chair?   |       |
| 1.2                    | Is the user's weight likely to fluctuate?  |       |
| 1.3                    | Have you considered the weight of the device and mounting system as well as other accessories?   |       |
| 1.4                    | Does the user have any unintentional movement or spasm that may affect where the device is positioned?   |       |
| 1.5                    | Does the user have any intentional or unintentional postures, such as leaning out of the chair, which may affect the stability of the chair?                         |       |
| 2. EQUIPMENT FACTORS   |  |       |
| 2.1                    | Is the wheelchair and seating system finalised?  |       |
| 2.2                    | Does the mounting system need to hold the device in more than one position?  |       |
| 2.3                    | Will the position of the mounting clamp obstruct the moving parts of the wheelchair – i.e. swing-away footplates, tilt mechanisms, brake levers?                     |       |
| 2.4                    | Even if not obstructing a moving part, will the placement of the mounting system cause a potential finger trap against other parts of the chair, for user or carers? |       |
| 2.5                    | Will any part of the device or mounting protrude beyond the boundaries of the chairs width, length or height?  |       |
| 3. USER PROPULSION     |  |       |
| 3.1                    | Will the user propel the chair themselves either manually or under power?  |       |
| 3.2                    | If propelling themselves, is the mounting system or device likely to obstruct the user's means of propulsion?  |       |
| 3.3                    | If propelling themselves, is the mounting system or device likely to obstruct the field of vision necessary to propel the chair safely?                              |       |
| 3.4                    | If propelling themselves, does the user have good control over the wheelchair?   |       |
| 3.5                    | Is the equipment or mount vulnerable to damage if the chair collides with a wall or other object in the environment?   |       |
| 4. OTHER USER ACTIVITY |  |       |
| 4.1                    | Does the user need to be able to swing away the device independently?  |       |
| 4.2                    | Does the user need to remove the device from the chair themselves?   |       |
| 4.3                    | Does the user need to be able to remove the mount from the chair independently?  |       |
| 4.4                    | Can the user swing the device back from its swung away position?   |       |
| 4.5                    | Can the user replace the device and mount independently if they have been removed?   |       |
|                        |  |       |

|                          |  |       |
|--------------------------|--|-------|
| 4.6                      | Will the user wish to attach bags or other accessories to the handlebars or other areas of the chair?  | Notes |
| 4.7                      | Can the user get up to desks and tables as necessary with the mounting and device in each possible position?   |       |
| <b>TRANSFERS</b>         |  |       |
| 5.1                      | Are all the users' methods of transfer known?  |       |
| 5.2                      | If stand transferring independently, can the user move the device and mounting out of the way sufficiently to transfer?  |       |
| 5.3                      | If stand transferring with assistance or hoisting, does the mounting system or device interfere with carer activity?   |       |
| 5.4                      | Is the user's method of transfer likely to change in the future, following possible changes in their condition?  |       |
| 5.5                      | Will the wheelchair become unstable if the mounting and device are swung away during transfer and the user's weight leaves the chair?                                      |       |
| 5.6                      | Can the equipment be removed quickly enough for emergency transfers?   |       |
| <b>6. TRANSPORT</b>      |  |       |
| 6.1                      | Will the wheelchair be transported in a vehicle?   |       |
| 6.2                      | It is recommended that devices and mountings are removed during transit. Are there any exceptional circumstances which would require the device to be used during transit? |       |
| 6.3                      | Does the user use more than one vehicle, i.e. own vehicle, hospital or school transport, community transport?  |       |
| 6.4                      | Does the clamp interfere with tie down points on the wheelchair intended for securing the wheelchair inside the vehicle?   |       |
| 6.5                      | Has the method for storing the device and mounting system during transport, been identified?   |       |
| <b>7. ENVIRONMENT</b>    |  |       |
| 7.1                      | Will the user use the chair and mounted device outside?  |       |
| 7.2                      | If used outside, is the mounting and device sufficiently protected from the rain?  |       |
| 7.3                      | Can the device be viewed in strong sunlight in the position in which it is mounted?  |       |
| 7.4                      | If used outside, will the terrain be rough or sloped?  |       |
| 7.5                      | Will the user need to climb curbs?   |       |
| <b>8. CARER ACTIVITY</b> |  |       |
| 8.1                      | Do carers consistently perform standard activities from a particular side of the chair? I.e. feeding.  |       |
| 8.2                      | Will the mounting obstruct carers carrying out care giving activities?   |       |

**ADDITIONAL INFORMATION**

This is an optional section for any relevant information gathered prior to, or during, assessment that is not covered in the assessment checklist.

**PART THREE – RISK ANALYSIS**

**Note:** This list is not a comprehensive list of possible risks. Staff completing this form should always consider the individual users situation and attempt to identify other possible risks, 15 common risk areas and possible standard ways of managing these risks are highlighted and blank sections are provided for the addition of other identified risks. **Refer to Appendix A, the Risk Matrix, for guidance on assessing likelihood, severity and final risk score.**

|  |  |            |            |          |       |
|--|--|------------|------------|----------|-------|
| <b>RISK<br/>1</b>  | Risk to the user if the chair fails or tips because the total weight of the user, device, mount and other accessories is greater than the recommended maximum weight limit of the wheelchair at time of fitting.   | Likelihood | Severity   | Score    |       |
| <b>Standard management:</b> DO NOT FIT MOUNTING OR DEVICE. CONTACT WHEELCHAIR SERVICE.   |  |            |            |          |       |
| <b>Other management:</b>   |  |            |            |          |       |
| <b>RISK<br/>2</b>  | Risk to the user if chair tips over due to changes in centre of gravity caused by weight changes, whether increasing or decreasing, in the user.   | Likelihood | Severity   | Score    |       |
| <b>Standard management:</b> Inform user/carer and provide written instructions to notify staff if users weight changes.  |  |            |            |          |       |
| <b>Other management:</b>   |  |            |            |          |       |
| <b>RISK<br/>3</b>  | Risk of injury to the user if chair tips over due to temporary dynamic changes in centre of gravity caused by the user intentionally leaning out of the chair to reach objects in the environment.                 | Likelihood | Severity   | Score    |       |
| <b>Standard management:</b> Written and verbal advice given that the user should not lean out of the chair or should always be supervised by a carer if user is unable to follow instruction and is prone to leaning out of the chair. |  |            |            |          |       |
| <b>Other management:</b>   |  |            |            |          |       |
| <b>RISK<br/>4</b>  | Risk of injury to the user if chair tips over due to temporary dynamic changes in centre of gravity from the user unintentionally leaning out of the chair due to uncontrolled spasms or lack of postural support. | Likelihood | Severity   | Score    |       |
| <b>Standard management:</b> Written advice to review seating and postural management if such spasms or lack of postural support are noted.   |  |            |            |          |       |
| <b>Other management:</b>   |  |            |            |          |       |
| <b>RISK<br/>5</b>  | Risk of pressure injury to user if unintentional movements cause the user to make contact with the EAT device or mounting system.  | Likelihood | Severity   | Score    |       |
| <b>Standard management:</b> Pad the mounting or device to reduce pressure risk.  |  |            |            |          |       |
| <b>Other management:</b>   |  |            |            |          |       |
| <b>RISK<br/>6</b>  | Risk to the user and/or others if the means of propelling the chair either manually or under power is obstructed by the mounting system or device in any position.   | User       | Likelihood | Severity | Score |
|  |  | Other      |            |          |       |
| <b>Standard management:</b> Do not mount IF the device causes an obstruction to propulsion in every position. Provide written instructions only to propel chair when device is in a specified position.                                |  |            |            |          |       |
| <b>Other management – User:</b>  |  |            |            |          |       |
| <b>Other Management – Other:</b>   |  |            |            |          |       |

|  |  |       |            |          |       |
|--|--|-------|------------|----------|-------|
| <b>RISK<br/>7</b>  | Risk to the user and/or others if the user propels the chair either manually or under power and their vision is obscured by the mounting system or device in any position.   | User  | Likelihood | Severity | Score |
|  |  | Other |            |          |       |
| <b>Standard management:</b> Provide written and verbal instructions to be aware and take account of blind spots when driving.  |  |       |            |          |       |
| <b>Other management – User:</b>  |  |       |            |          |       |
| <b>Other management – Other:</b>   |  |       |            |          |       |
| <b>RISK<br/>8</b>  | Risk to the user who self propels either manually or under power, if the mounting system extends beyond the dimensions of the wheelchair to the front, rear or sides, as this will affect safe clearance of the chair. |       | Likelihood | Severity | Score |
|  |  |       |            |          |       |
| <b>Standard management:</b> If changing overall dimensions cannot be avoided, provide written and verbal instructions to be aware of additional dimensions of the chair.   |  |       |            |          |       |
| <b>Other management:</b>   |  |       |            |          |       |
| <b>RISK<br/>9</b>  | Risk to the user if the chair tips over due to changes in centre of gravity caused by the hanging of bags and other accessories from the handlebars or other areas of the chair.                                       |       | Likelihood | Severity | Score |
|  |  |       |            |          |       |
| <b>Standard management:</b> Provide written and verbal advice not to hang bags or other accessories from any part of the chair.  |  |       |            |          |       |
| <b>Other management:</b>   |  |       |            |          |       |
| <b>RISK<br/>10</b>   | Risk of injury to the user or carer, or damage to device, if the chair tips over when device is left in the swung away position.   | User  | Likelihood | Severity | Score |
|  |  | Other |            |          |       |
| <b>Standard management:</b> Provide written and verbal advice not to leave the mount in the swung away position and to remove device and mount if possible, during transfers.                                      |  |       |            |          |       |
| <b>Other management – User:</b>  |  |       |            |          |       |
| <b>Other management – Other:</b>   |  |       |            |          |       |
| <b>RISK<br/>11</b>   | Risk of injury to user or carers due to trapping body parts between the mounting or device and the wheelchair, or in moving mechanisms of the mount.   | User  | Likelihood | Severity | Score |
|  |  | Other |            |          |       |
| <b>Standard management:</b> Provide written and verbal warnings regarding the danger areas for entrapment and to instruct carers in safe fitting and removal of the device and mount.                              |  |       |            |          |       |
| <b>Other management – User:</b>  |  |       |            |          |       |
| <b>Other management – Other:</b>   |  |       |            |          |       |
| <b>RISK<br/>12</b>   | Risk of injury to user or other vehicle occupants if device and mount are left in position during transit and move when subjected to dynamic forces of driving.  | User  | Likelihood | Severity | Score |
|  |  | Other |            |          |       |
| <b>Standard management:</b> Provide written and verbal advice to always remove and safely store both the device and mount before transit. Provide an alternative, low tech method of communication during transit. |  |       |            |          |       |
| <b>Other management – User:</b>  |  |       |            |          |       |
| <b>Other management – Other:</b>   |  |       |            |          |       |



|                    |  |       |            |          |       |
|--------------------|--|-------|------------|----------|-------|
| <b>RISK<br/>13</b> | Risk of injury to user or carers and damage to equipment if the chair tips over when used on an incline.<br><b>NOTE</b> – separate risks should be documented in the blank areas provided if any areas of the users anticipated environment are identified as a particular risk. | User  | Likelihood | Severity | Score |
|                    |  | Other |            |          |       |
|                    |  | Equip |            |          |       |

**Standard management:** Provide written and verbal instruction on the use of wheelchairs on slopes and over obstacles such as curbs. Warn the user that stability will change when used on a slope.

**Other management – User:**

**Other management – Other:**

**Other management – Equipment:**

|                    |   |        |            |          |       |
|--------------------|---|--------|------------|----------|-------|
| <b>RISK<br/>14</b> | Risk of damage to device or mount if the device or mount get wet. | Device | Likelihood | Severity | Score |
|                    |   | Mount  |            |          |       |

**Standard management:** Provide written and verbal warnings not to allow the device or mount to get wet AND provide advice on strategy to cover or dismount equipment in the event of being caught in the rain.

**Other management – Device:**

**Other management – Mount:**

|                    |  |       |            |          |       |
|--------------------|--|-------|------------|----------|-------|
| <b>RISK<br/>15</b> | Risk of injury to user or carer if nuts, bolts or other fitting become loose over time and mounting fails. | User  | Likelihood | Severity | Score |
|                    |  | Other |            |          |       |

**Standard Management:** Provide written and verbal instructions to check all components periodically especially if the chair has a knock or travels over rough ground.

**Other management – User:**

**Other management – Other:**

|                    |  |       |            |          |       |
|--------------------|--|-------|------------|----------|-------|
| <b>RISK<br/>16</b> |  | User  | Likelihood | Severity | Score |
|                    |  | Other |            |          |       |

**Standard Management:**

**Other management – User:**

**Other management – Other:**

|                    |  |       |            |          |       |
|--------------------|--|-------|------------|----------|-------|
| <b>RISK<br/>17</b> |  | User  | Likelihood | Severity | Score |
|                    |  | Other |            |          |       |

**Standard Management:**

**Other management – User:**

**Other management – Other:**

**APPENDIX A: EXAMPLE RISK MATRIX**

(FOR REFERENCE – please contact your own risk manager for local risk matrices)

**Risk Level is calculated by multiplying the Likelihood by the Severity**

Risk level 2 or less      No action required  
 Risk level 3 to 6      Endeavour to reduce risk or warn against  
 Risk level 7 to 8      Reduce risk or warn against  
 Risk level 9 or above      Design changes must be undertaken

Scores of 0 – 2 need not be addressed. Scores of 3 – 8 are generally acceptable if information or strategies are given to manage the risk. Standard strategies are provided which should be followed if the score is between 3 and 8, but space is also provided to record other risk reduction strategies. Scores greater than 8 should generally not be seen, because if such a score is reached, the proposed mounting is not suitable and another design or engineering solution should be considered.

|  | Severity:<br><b>Negligible</b><br>Score: 1   | Severity:<br><b>Marginal</b><br>Score: 2                     | Severity: <b>Critical</b><br>Score: 3                        | Severity:<br><b>Catastrophic</b><br>Score: 4                 |
|--|--|--|--|--|
| Likelihood:<br><b>Frequent</b><br>Score: 5   | 5 Hazard control desirable if cost effective | 10 Design action required to eliminate or control the hazard | 15 Design action required to eliminate or control the hazard | 20 Design action required to eliminate or control the hazard |
| Likelihood:<br><b>Probable</b><br>Score: 4   | 4 Hazard control desirable if cost effective | 8 Hazard must be controlled or its probability reduced       | 12 Design action required to eliminate or control the hazard | 16 Design action required to eliminate or control the hazard |
| Likelihood:<br><b>Occasional</b><br>Score: 3 | 3 Hazard control desirable if cost effective | 6 Hazard control desirable if cost effective                 | 9 Design action required to eliminate or control the hazard  | 12 Design action required to eliminate or control the hazard |
| Likelihood:<br><b>Remote</b><br>Score: 2     | 2 Assume will not occur                      | 4 Hazard control desirable if cost effective                 | 6 Hazard control desirable if cost effective                 | 8 Hazard must be controlled or its probability reduced       |
| Likelihood:<br><b>Improbable</b><br>Score: 1 | 1 Assume will not occur                      | 2 Assume will not occur                                      | 3 Hazard control desirable if cost effective                 | 4 Hazard control desirable if cost effective                 |
| Likelihood:<br><b>Incredible</b><br>Score: 0 | 0 Impossible occurrence                      | 0 Impossible occurrence                                      | 0 Impossible occurrence                                      | 0 Impossible occurrence                                      |

**Definitions**

Frequent: Likely to occur frequently in equipment life  
 Probable: Likely to occur several times in equipment life  
 Occasional: Likely to occur sometime in equipment life  
 Remote: Unlikely to occur in equipment life  
 Improbable: Extremely unlikely to occur in equipment life  
 Incredible: Cannot occur – probability zero

Negligible: Very unlikely to sustain any injury  
 Marginal: Possibility of minor injury (first aid only required)  
 Critical: Significant injury possible (hospital treatment)  
 Catastrophic: Major injury / Death

**APPENDIX B: STABILITY TESTING – (Recommended but optional)**

Note: Static stability testing on its own cannot represent all the possible risks that may occur in a typical outdoor environment with the chair in motion, it is only a guide. The risk analysis should be used to help anticipate stability related risks in the typical environment of use of an individual user.

If possible take photographs in each position tested, but ensure user consent for photography is obtained.

Staff involved in stability testing:

|   | <b>Degrees .....</b> |      |      |       |
|---|----------------------|------|------|-------|
|   | Front                | Back | Left | Right |
| Static test without user and without EAT device(s) mounted.   |                      |      |      |       |
| Static test without user and with EAT device(s) mounted in position of normal use.  |                      |      |      |       |
| Static test with user and without EAT device(s) mounted.  |                      |      |      |       |
| Static test with user and with EAT device(s) mounted in position of normal use.   |                      |      |      |       |
| Detail other situations tested below – i.e. with and without user with EAT device(s) in swing away or fold away storage positions |                      |      |      |       |
|   |                      |      |      |       |
|   |                      |      |      |       |
|   |                      |      |      |       |

**APPENDIX C : WRAMP HANDOVER FORM** ( Page 1 of 2 )

This **two** page form is used to record the equipment handover procedure. Issue this page in conjunction with the attached first page: '**Standard and specific safety information**'. Note all relevant points on this form especially details of the persons present and the equipment, training and support materials provided. Copy both pages and issue to the user or carer, retaining the original for service records.

**Standard and specific safety information for this system**

- 1) This risk assessment is valid for this person using the stated wheelchair and equipment only. Equipment must not be transferred onto another wheelchair.
- 2) Changes in the weight of the user may affect the stability of the wheelchair. Please notify the prescribing service or department if the weight of the user changes significantly (weight gain or loss), or if other organisations change any of the listed equipment.
- 3) Unless in exceptional circumstances and specifically stated in written instructions, the device and mounting system (except for clamps that are fixed to the wheelchair) should always be removed from the chair before the chair and user are placed in transport. The device and mount must be packed and secured safely during transport.
- 4) Unless otherwise stated and documented, the device and mounting system are not intended for use outdoor in the rain. If the user is unavoidably caught outdoors in the rain, the device and mount should be covered or removed from the wheelchair and stored in a dry environment.
- 5) If the wheelchair is used over rough ground all fittings on the mounting system should be checked to see if they are becoming loose and tightened accordingly.
- 6) All moving parts, fasteners, clamps, tubes and fittings should be checked regularly and tightened, any problems should be reported.
- 7) The stability of this wheelchair may change if taken up or down slopes or over rough ground. Always approach slopes or uneven ground with caution. Always approach and traverse slopes, kerbs or other environmental obstacles at a 90 degree angle, i.e. it is usually safer to push the chair directly up or down the slope or obstacle rather than moving diagonally across the slope.
- 8) Do not hang bags or other items from the push-handles or other parts of the wheelchair unless items have been specifically provided for this purpose and have been considered in the risk analysis and this is specifically stated in the documentation provided.
- 9) If the user develops any unintentional movements or spasms which have not been considered prior to the supply of the mounting system, this may affect stability of the chair and should be reported to the service issuing the equipment.
- 10) The Risk Assessment is based on information provided at the time of completion. It is important to carry out regular reviews to ensure continuing safety of the equipment and user. If any additional hazards are identified following completion please contact the installing authority.

**11) IMPORTANT - Additional specific safety information for this system:**

For example - potential finger traps or swing away positions in which the system should not be left unattended, should be documented on a separate sheet and attached to this form, with a record made here, that such a sheet is attached.

Is additional specific safety information for this system attached:

☐

Yes

☐

No

Description of specific information for this system:

Name:

Signature:

Date:

**THIS RISK ASSESSMENT IS NOT EXHAUSTIVE, THERE MAY BE CIRCUMSTANCES THAT HAVE NOT BEEN CONSIDERED. COMMON SENSE WILL NEED TO BE EXERCISED.**

**USER DETAILS**

|                  |
|------------------|
| Name of User:    |
| Address of User: |

**HANDOVER DETAILS**

|   |                |
|---|----------------|
| Description of equipment being handed over:   |                |
| Description of additional documents handed over (example: instruction books, service manuals, safety sheets etc...) |                |
| Handover staff name:  | Position:      |
| Signature:  | Handover date: |
| Contact details of service:   |                |

**KEY PERSON(S) TO WHOM HANDOVER IS GIVEN**

|                       |       |
|-----------------------|-------|
| <b>1)</b> Name:       |       |
| Relationship to user: |       |
| Signature:            | Date: |

|                       |       |
|-----------------------|-------|
| <b>2)</b> Name:       |       |
| Relationship to user: |       |
| Signature:            | Date: |

**IMPORTANT NOTE: It is the responsibility of the key person(s) above to ensure that all other relevant carers are aware of the safety implications in the use of equipment issued.**

**Appendix D MOUNTING QUESTIONNAIRE To be returned by.....**

1. What is the make of the wheelchair and seating system? \_\_\_\_\_
2. What is the model of the wheelchair? \_\_\_\_\_
3. Is this an electric/powerd wheelchair? ☐ Yes ☐ No
4. If **YES**, how is the wheelchair controlled? \_\_\_\_\_  
Where is this equipment positioned? \_\_\_\_\_
5. Does the user propel the chair themselves? ☐ Yes ☐ No
6. If the user self propels, is their steering accurate? ☐ Yes ☐ No
7. What is the weight limit of the chair? \_\_\_\_\_
8. Is the seating system likely to be altered or reviewed within the next six to twelve months? ☐ Yes ☐ No
9. What is the user's weight? \_\_\_\_\_
10. Is the user's weight likely to fluctuate? ☐ Yes ☐ No
11. If **YES**, will this have an impact on the weight limit for the wheelchair? ☐ Yes ☐ No
12. Is there anything else permanently or temporarily attached to the wheelchair, eg: bags, switches etc? ☐ Yes ☐ No
13. If **YES**, what are the items and what is the approximate weight \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
14. Does the user have any movements or postures that are likely to affect the position of any equipment that is mounted on to the chair? ☐ Yes ☐ No
15. If **YES**, what are these \_\_\_\_\_  
\_\_\_\_\_
16. Are there any narrow doors or tight corners within the user's environment that will have an impact upon where the device is mounted? ☐ Yes ☐ No
17. Does the user need to be able to get to desks or tables while the device is mounted on the wheelchair? ☐ Yes ☐ No
18. How does the user transfer to and from the wheelchair? \_\_\_\_\_  
\_\_\_\_\_
19. From which side are caring activities carried out? ☐ Right ☐ Left
20. Is the wheelchair ever folded up, dismantled or altered, eg: for transport? ☐ Yes ☐ No
21. If yes please describe how. \_\_\_\_\_
22. Address of Wheelchair Services responsible for maintenance of Wheelchair.....

.....  
Please include any additional information that may help us to plan for your mounting assessment eg photographs, drawings etc.

**Appendix E****PRIVATE AND CONFIDENTIAL**

Name

Address

Date

Dear

RE: **WHEELCHAIR MOUNTING FOR** NAME OF PATIENT (DATE OF BIRTH: )  
PATIENT'S ADDRESS

I am writing with regard to the above named person, who I understand has a Wheelchair, supplied and maintained by you. He/she needs to have his/her device mounted onto their wheelchair to enable them to have access to it.

The details of the device and proposed mounting system are included on the enclosed form.

A risk assessment procedure will be carried out and, provided the results are satisfactory, the device will be mounted onto the chair.

I would be grateful if you would kindly complete the form enclosed with this letter and return it to me at the above address.

Thank you for your assistance in this matter.

Yours sincerely/faithfully

***PRIVATE AND CONFIDENTIAL*****MOUNTING CONSENT**

|  |  |
|--|--|
| Name   |  |
| Date of Birth                                |  |
| Make of wheelchair                           |  |
| Model of wheelchair                          |  |
| Estimated weight of mounting system + device |  |
| Device and System                            |  |

Please check the above details and complete the details below:-

Weight limit of wheelchair: .....

I agree that the device and mounting system detailed above can be mounted onto the wheelchair of the above named patient, provided that a risk assessment is carried out and the results are satisfactory.

☐ YES/NO ☐

To the best of my knowledge the user with the above mentioned device, the mounting system and seat is within the weight limit of the chair.

☐ YES/NO ☐

I would like a copy of the Risk Assessment.

☐ YES/NO ☐

To the best of your knowledge do you consider that the weight of the mounting system and device will cause a stress fracture to the wheelchair?

☐ YES/NO ☐

Signed.....

Position.....



## Appendix F: References

### References

[www.mhra.gov.uk](http://www.mhra.gov.uk) Medical devices, wheelchair stability, adverse incident reports.  
[http://ec.europa.eu/enterprise/medical\\_devices/meddev](http://ec.europa.eu/enterprise/medical_devices/meddev) - electromagnetic compatibility  
<http://www.hse.gov.uk/risk/index.htm> - Risk Management  
<http://www.rivm.nl/bibliotheek/rapporten/318902012.html>  
Risk matrix evaluation – Keele University