

# Disabled people and the National Cycle Network

## 1 Introduction

Over 6 million people in Britain have some form of disability (1) and they often find themselves excluded from the activities that other people take for granted because their needs have not been addressed at the planning stages of key projects.

In partnership with Sustrans, Local Authorities and other organisations all over the UK are developing the National Cycle Network which we believe will bring a whole range of benefits to many disabled people. This document addresses issues relating to its use by disabled people. We know that there are genuine concerns voiced by different users, including disabled people, about shared use, and this document should be read in conjunction with Sustrans' Information Sheet Shared Use Routes (2).

## 2 National Cycle Network

The National Cycle Network will be a UK-wide 8,000 mile network of safe, high quality routes for cyclists which will also greatly expand the facilities for walkers of all abilities.

In progress for completion by 2005, the National Cycle Network is a flagship project designed to help generate widespread public enthusiasm for non-motorised travel.

Just over half of the network will be on minor roads, and the remainder will be on routes generally free from motor traffic. It is these traffic-free routes, designed for a mix of different users, which will be of most benefit to disabled people - including walkers



Toby Smedley

Traffic free routes benefit walkers and cyclists of all abilities and wheelchair users.

and cyclists of all abilities and wheelchair users. The routes which are likely to be most attractive are newly constructed shared use paths and upgraded paths, which are described below.

## 3 New paths

For over fifteen years, Sustrans has been building paths free from motor traffic largely on disused railways and canal towpaths. It is sometimes forgotten that a very large proportion of those who like to walk - and almost all wheelchair users - are discouraged because of bad surfaces, steps and styles. Sustrans' paths, in contrast, attract people of all abilities and all ages, to mix and mingle in a friendly and safe environment.

Sustrans' paths are designed for shared use by cyclists of all abilities, walkers, those with prams and buggies, and wheelchair-users. These paths offer some of the most extensive outdoor facilities for disabled people in the UK.

### Definitions (3)

Where disability is referred to in this information sheet, we mean:  
*Any restriction or limitation, resulting from an impairment, of ability to perform an activity within the range considered standard for a human being.*

Where disabled people are referred to, we mean:

- People who
- use wheelchairs and specialised cycles
  - walk with difficulty, including those with a psychological loss of function
  - have heart and lung disorders
  - are blind and partially sighted
  - are deaf and hard of hearing.

For some disabled cyclists they represent the only facilities to cycle any distance, whether for recreation or between home and workplace, school, or shops.

Over 1,000 miles of the National Cycle Network, already completed and in use in different parts of the country, are shared use paths, purpose-built by Sustrans or local authorities (along railway paths,

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canal and riverside paths, urban cycle tracks). Plans for the National Cycle Network include a substantial additional mileage of purpose-built shared use paths.

Sustrans itself was surprised at first to discover just how popular its routes were with walkers and wheelchair users. Of the million or more journeys made each year on the Bristol and Bath Railway Path for example, well over half are walkers, and a significant number are wheelchair users (4). Increasingly Sustrans' paths are also being used by disabled cyclists, many of whom are accompanied on tandems or specialist cycles.

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## 4 Upgraded routes

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In addition to newly constructed paths, disabled people will benefit from existing paths that will be upgraded to form part of the National Cycle Network. Many canal and riverside paths, for example, are currently impassable to all but the hardest walkers. Upgrading such paths will make them more widely accessible for disabled people and walkers with buggies and prams.

The Kennet and Avon towpath for example, from Bath to Devizes, was previously a muddy track with stiles and steps. Its upgrading by Sustrans to a shared use path has led to a huge increase in use by walkers and by wheelchair users. Now one of the most popular attractions in the area, it is sometimes so busy that cyclists have to get off and walk.

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## 5 Safety

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Cyclists, pedestrians, people with prams and buggies, wheelchair users, and horse riders all benefit from routes free from motor traffic. Although some authorities react at first against shared use, concerned that walkers will be at risk from cyclists, the risk to both groups is overwhelmingly from motor traffic.

On paths free from motor traffic, the main concern expressed by disabled

users is being passed too closely by a speeding cyclist, combined with the fear of being hit by one.

Sustrans accepts that, however low the actual risk of being hurt in an accident, there is a perceived danger that affects users' behaviour. If people perceive conditions to be unsafe they will not use the route. Some user groups are concerned that for many visually impaired and deafblind people the introduction of shared use facilities is leading to a perception of increasing danger in the pedestrian environment, which in turn can restrict their mobility.

There has been limited research carried out on shared use routes, and much of the information available is anecdotal. However, in our experience of developing shared use paths, potential problems can be minimised through early consultation, good design standards, and publicity and education.

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## 6 Consultation

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In the planning and design of a shared use path early consultation with different user groups is essential to ensure that proper account is taken of their concerns. Sub-standard shared use paths can be unpleasant and dangerous for pedestrians and cyclists alike.

Consultation with residents, cycling, pedestrian and disabled access groups will normally be undertaken through local authority channels, although Sustrans also welcomes direct contact with such groups. Consultation with disabled access groups should include those representing people with sensory impairments. Proper consultation is essential to ensure that attention is paid to the details necessary for a successful route.

Sustrans has published guidelines for the National Cycle Network, which include design details for shared use paths. "National Cycle Network: Guidelines and Practical Details" (5) provides advice on the selection and design of routes, and sets out examples of good practice. Feedback on these Guidelines is welcomed for the development of further editions.

Further details of the development of new shared use routes have been published separately (6).

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## 7 Good design

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Good design is essential. Sustrans, the Institution of Highways and Transportation, and the DETR have all published separate guidelines which include advice on detailed design for shared use paths (5,6,7,8). This section draws on information from these guidelines on access controls and facilities for visually impaired users. Reference should be made to the full documents for more details.

### Access Controls

There should be a presumption against the use of any barriers on shared use routes because of the difficulties they can cause for access, and Sustrans is currently reviewing the level of control on each access to its paths, with a view to reducing the degree of restriction. In our experience a high level of usage is the best form of deterrent when considering issues such as motorcycles, fly tipping and occupation by caravans.

However, Sustrans recognises that there will be situations where access barriers in some form will be required, but it is important that the level of restriction be as low as possible commensurate with the problem to be tackled. Bollards should be the first choice of access control, to discourage access by motor vehicles.

Whatever form of access control is provided should be designed with regard to the needs of disabled users. Bollards should be at least one metre high and contain a contrasting strip near the top to help partially sighted people. They should be spaced to allow access by wheelchairs and cycles used by disabled people such as "side by side" tricycles and specialised tandems. Bell or ball style bollards should not be used as these are difficult to detect by visually impaired and deafblind people.

If motorcycles subsequently become a significant problem, then more restrictive forms of barrier should be considered, such as the 'York' style access control. Sustrans has recently revised the design for this, following trials with a wheelchair. The resultant barrier, with a wheelchair bypass, should be negotiable by most forms of wheelchair, including motorised versions.

However, this type of barrier still creates considerable difficulties for non-standard cycles and wheelchairs. It also causes difficulties for tandems, tricycles, recumbent cycles, and cycles with child or luggage trailers.

Where there is a perceived problem with motorcyclists we therefore recommend that only part of a full barrier should be installed in the first instance, narrowing the access. The remainder should only be installed if there really proves to be a problem after completion of the route. A full barrier should only be installed at the outset where there is a well established problem with motorcycles, or where a local authority makes it a condition of consent for a route.

In some areas the use of a RADAR gate and key system is being tried, to enable those with a RADAR key to bypass the access control. However, not all potential users hold keys, many do not like having to use such a key, and we are aware of instances where locks have rusted up.

## Access Information

As the National Cycle Network is put in place on the ground, we propose to develop comprehensive information showing the levels of access control in operation on each path, and any other features known to cause difficulties for disabled users. Users can then plan their journeys knowing what to expect.

The location of access controls are currently shown on published National Cycle Network maps. However, for more detail of the type of access control in place, map users are referred to the Sustrans' information sheet: Guide to Access Controls (9).



*In urban areas, segregation can benefit all users.*

## Visually Impaired People

Over one million adults are blind or partially sighted, and many of these have additional disabilities, especially hearing loss (10). Sustrans' shared use routes are in fact already well used by walkers with sight impairments, because the routes are well-surfaced, continuous, protected from motor traffic, and convenient for local and leisure trips. Negotiating our overcrowded road and pavement network carries unlimited hazards for those who cannot see well - particularly when crossing roads.

However, people who are blind or partially sighted can feel endangered on routes shared with passing cyclists who, unlike motor vehicles, are almost completely silent. Sustrans recognises that some form of segregation may help them to use the paths more safely and confidently.

In urban areas where the level of use is high, complete segregation of pedestrians and cyclists by means of a dedicated cycle track or a level difference should be the aim of highway authorities, particularly in new developments. This will not only assist visually impaired people, but will also be helpful to other vulnerable pedestrians.

The most common method of tactile segregation is by using a raised profile white line delineator. This should include tactile surfaces at access points and at intervals along the route to indicate which are the

pedestrian and cycle sides. Guidance on this is published by the DETR (11).

Physical separation will not always be necessary or desirable, and in rural areas unsegregated paths will be the norm. There are varied reasons for this including: many paths attract family groups which include both walkers and young children on bicycles; shared use of space enables a greater width for everyone including wheelchair users who appreciate a wider space to manoeuvre in; physical separation on canal paths would separate one group from the enjoyment of being by the water; complete physical separation would be impossible on many stretches of path, and elsewhere it would be costly to install and to maintain.

Each situation must be considered on its merits, and consultation is essential to ensure that full account is taken of the needs of visually impaired users.

Designers should also consider how best to provide safe access to the path for visually impaired users, and ways of assisting these users once there, such as tactile information boards or tactile markings to locate benches or sculptures. Publicity should be used to inform them of the details of new shared use routes in their neighbourhood.

## 8 Publicity and education

Groups representing disabled people tell us they cannot stress too strongly the importance of cyclists becoming more aware of the needs of walkers generally and of disabled people in particular.

When introducing shared use paths the need for appropriate publicity and educational material should be considered, to inform all those affected by the scheme and to promote the need for responsible cycling. Sustrans promotes a Good Cycling Code with a section on shared use paths (12).

Cyclists need to learn to cycle at closer to walking speed when mixing with pedestrians and to behave courteously at all times. Where path rangers are employed they are able to encourage considerate behaviour by all users, but unfortunately funding is commonly not available for rangers.

Sustrans aims to raise cyclists' awareness of pedestrians through information provision and through its own network of supporters. Sustrans recommends clear signing indicating a shared facility and signs encouraging cyclists to take care and to give way to pedestrians. Sustrans' supporters are requested to set a good example to fellow cyclists - to behave in an appropriate way on shared use paths and not to cycle illegally on pavements.

Sustrans favours the compulsory fitting of bells on all cycles at the point of sale, and bells are the most popular item sold by Sustrans through our information catalogue. Cyclists wanting to reassure pedestrians that they are responsible riders can do this quickly and easily by fitting a bell straight away - and using it! Calling out a friendly greeting is also a positive way of reassuring other users.

*We are grateful to all those who have commented on this document so far and welcome further comments, which should be addressed to Tony Russell at Sustrans.*

## 9 A developing policy

Sustrans wants to play its part in empowering disabled people, and welcomes approaches from organisations and individuals who can assist in ensuring that the National Cycle Network is accessible to different users. Sustrans would like to work with groups near to its routes to ensure that the needs of cyclists and walkers of all abilities and wheelchair users can be met.

We welcome any feedback that groups or individuals are able to give us on the routes that disabled users find particularly suitable and those that cause particular problems. We would also welcome assistance from users to help ensure that our information is accurate and useful.

Some local authorities have adopted a hierarchy of road users on which their local transport planning is based. Sustrans recommends that pedestrians and disabled people should come first, then cyclists followed by public transport and finally cars and lorries.



Magali Garcia, London Cycling Campaign

*Specialised cycles enable disabled people to enjoy cycling.*

## References

1. DOT, 1996, *Transport - the Way Forward*.
2. Sustrans, 1998, *Shared Use Routes, Information Sheet FF04*.
3. *Based upon definitions used by the World Health Organisation, 1980, and Barnsley Metropolitan Council, 1997, Trans Pennine Trail Design Guide*.
4. Avon County Council and Sustrans 1992-4; 1995, *The National Cycle Network: Bid document to the Millennium Commission*.
5. Sustrans and Ove Arup & Partners, 1997, *The National Cycle Network: Guidelines and Practical Details, Issue 2*.
6. Sustrans, 1994, *Making Ways for the Bicycle: a guide to traffic-free path construction*.
7. Institution of Highways & Transportation, Cyclists Touring Club, DOT and Bicycle Association, 1996, *Cycle Friendly Infrastructures: guidelines for planning and design*.
8. DOT & Welsh Office, 1986, *Shared Use by Cyclists and Pedestrians, Local Transport Note 2/86*.
9. Sustrans, 1996, *Guide to Access Controls, Information Sheet FF09*.
10. Joint Committee on Mobility of Blind and Partially Sighted People, 1997, *Shared Facilities for Pedestrians and Cyclists, Policy Statement*.
11. DETR (Mobility Unit), 1997, *Guidance on the Use of Tactile Paving Surfaces (Notified Draft)*.
12. Sustrans, 1997, *Good Cycling Code*.

### Tourism and Leisure

Many disabled people enjoy cycling, often using specialised cycles and tandems. We would be most interested to hear from tour operators, bike hire companies and individuals who wish to promote the tourist and leisure potential of the National Cycle Network for disabled people. Services might include: arrangement of "companions" for cycling by tandem; specialised cycle hire; disabled access accommodation guides; specialist route guides; training for cyclists with special needs.

**Please contact Sophy Cushing, Public Information Officer.**