

ASSOCIATION OF TRAIN OPERATING COMPANIES CYCLE-RAIL TOOLKIT July 2012





FOREWORD BY PARLIAMENTARY UNDER-SECRETARY OF STATE FOR TRANSPORT

I am delighted to have the opportunity to endorse this new Cycle-Rail Toolkit, aimed at joining up these two important forms of transport and so helping to realise our aim of facilitating the end-to-end journey.

Cycling brings many benefits, and the Coalition Government is very keen to encourage its uptake as a healthy and sustainable transport choice. By getting rail passengers to leave their cars at home and take the bike instead, traffic congestion can be cut and carbon emissions slashed.

To ensure that using the bike becomes the preferred travel option, the Department for Transport is investing millions to make cycling safer and more convenient. For instance, through the £560m Local Sustainable Transport Fund, 38 of the first 39 schemes to be approved have a cycling element and around half of these will see improvements at stations.

I have also announced an investment of £7m through the Cycle-Rail Working Group for Cycle-Rail integration. I am happy to say that with match funding, this amounts to a spend of £12m in the infrastructure and facilities that will help to get rail commuters out of their cars and on to their bikes.

But this is just a first step in the work that needs to be done to make cycling to the station a viable travel option for passengers. I therefore welcome this Toolkit, aimed at Train Operating Companies, which sets out best practice in the provision of Cycle-Rail measures. I hope it will prompt train operators to consider what more they can do.

Train companies and the rail industry as a whole clearly recognise the important role cycling plays in our growing railway, but we need to encourage those bidding for future rail franchise agreements to reflect this in their bids. We are determined to ensure that the rail franchising process delivers better outcomes for passengers, and by granting longer and more flexible franchises we give the private sector a stronger incentive to invest in the improvements passengers want, including better cycle facilities at stations.

This toolkit will help train operators embed cycle-rail provision firmly within their business objectives by explaining how to provide for cyclists, how to encourage new users, and how to promote and market their facilities to ensure that maximum benefits are gained. Please use it to good advantage!

Norman Baker

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1. INTRODUCTION

1.1 Background

Cycling is growing in its importance as a mode of transport. People are increasingly looking to use cycling in conjunction with rail travel as part of a seamless endto-end journey (this is referred to as Cycle-Rail throughout this document). In response, national and local government, together with Train Operating Companies (TOCs), Network Rail and other bodies are investing considerable sums in measures to facilitate increases in Cycle-Rail activity.

Cycle access should be targeted to double at individual stations over the next five years (by 2014) — with a national target of 5% of passengers cycling to stations. This should be achieved through the specification of secure storage and extension of the cycle hub concept in future franchises, and through joint initiatives with local authorities to create segregated cycle routes. These initiatives should be reviewed after two years of experience.

Detailed recommendations: Better Stations Report 2009

1.2 The purpose of this document

The purpose of this Toolkit is to set out best practice in the delivery of measures to encourage more people to choose Cycle-Rail and support those who have already made that choice. It is a suitable resource for TOCs bidding for new rail franchises and for those involved in the planning and delivery of specific Cycle-Rail projects. It is accompanied by additional guidance on the delivery of effective station travel plans.

Whilst primarily aimed at network and station operators and organisations bidding for rail franchises, the intended audience also includes passenger transport executives (PTEs), local authorities and those involved in community rail projects. It should be read in conjunction with advice published by Network Rail and others, such as the Guide to Station Planning and Design. A list of useful documents, including the travel plan guidance, can be found at the back of this Toolkit.

In common with all aspects of service delivery within the rail industry, it is a cornerstone of this document that all measures should be customer-facing. It has the intention of meeting the users' needs, as a way of increasing rail patronage in general and Cycle-Rail in particular. Whilst individual measures will vary according to local conditions, those delivering Cycle-Rail projects should take a 'line-of-route' approach, not just a station-specific one; i.e. the measures provided should be consistent and recognisable throughout the network. In addition, small stations should not be ignored in favour of large ones, since all can make a valuable contribution. This approach will help passengers develop confidence that Cycle-Rail

services will be available at all of their destinations.should not be ignored in favour of large ones since all can make a valuable contribution. This approach will help users develop confidence about which Cycle-Rail services will be available at all of their destinations.

It is not the intention of this document to set out the wider benefits of cycling: it is considered that this is well documented elsewhere. Recognition of these benefits is already reflected in the major Cycle-Rail projects being funded by central and local government, Network Rail and the train operating companies (TOCs). The goal of this Toolkit is to ensure that what is delivered is not only fit for purpose but also a positive encouragement to the use of cycling to gain access to rail services. In order to achieve this goal it is implicit that TOCs should embed Cycle-Rail within their business objectives at the highest level and develop their own strategy for its delivery.

The Sustainable Development Principles represent core values of the rail industry and are fundamental in delivering a sustainable railway at the centre of the transport system that meets the travel needs of society without compromising future quality of life. These principles highlight the importance of providing end to end journeys by working together with all transport modes to provide an integrated, accessible transport system that takes account of the non-rail leg of the journey

The Rail Industry Sustainable Development Principles Rail Safety and Standards Board

1.3 How this document is set out

This Toolkit starts by setting the context and demonstrating the case for Cycle-Rail. It then goes on to explain how to provide for existing users, and encourage new ones, by meeting their needs as part of a seamless end-to-end journey. To do this, it follows the logical path of the trip to the station followed by entry to, and, movement within it. Once there, the full range of potential services that support and encourage Cycle-Rail are discussed in more detail. This is followed by chapters which address cycle parking and marketing and promoting the measures provided. Next, it explains the need to monitor and maintain what has been provided and recommends a means of sharing new and innovative projects with others through the ATOC Cycle-Rail awards. The final chapter identifies the benefits of partnership working to maximise the delivery of effective services and to ensure the support of the local community.

Two appendices are included; these cover information on cycle parking layouts and wider security issues. A list of useful documents is provided at the back of the Toolkit

2. CONTEXT: WHY CYCLE-RAIL IS IMPORTANT

2.1 Cycle-Rail has benefits for the rail industry

The importance of cycling to rail stations as part of the end-to-end journey is growing daily. It brings not only sustainable access to the rail network at a time when demand for rail travel is increasing, but also the potential for enhanced profitability for network and station operators. For the customer, aside from walking, cycling to the station consistently offers the most reliable journey time as it is the least susceptible to delays caused by congestion. Cycling is also door-to-door - no waiting around for buses or taxis to arrive.

Despite the fact that 60% of the UK's population lives within a 15 minute cycle ride of a railway station, with one or two exceptions, the level of cycling to stations is low (2% - 2004 figures). This is especially true when compared to some of our mainland European neighbours. For example, according to the Dutch Ministry of Transport, 40% of train passengers in Holland use the bicycle to get to the station (Cycling in the Netherlands 2009). Nevertheless, in just two years (2007 – 2009), the number of cyclists in the UK using a bicycle in conjunction with a rail journey has risen by over 40%.

At the same time as this Cycle-Rail activity has risen, the number of people using the rail network has also increased. Although it would be good to persuade new rail passengers to use sustainable forms of transport, it is known that they are likely to want to drive to the station. This has the disadvantage that, as passenger numbers rise, greater competition takes place for the car parking spaces available. This is especially true of those stations where the ability to expand car parking is constrained. Clearly, not being able to park has the potential to limit growth in this market. As a way of addressing this, encouraging existing passengers to cycle as part of their journey can free up car parking for the new customers.

Many rail stations do not have the physical space to provide more car parking. Parked bicycles, though, make more efficient use of space; one car parking space easily accommodating eight bicycles.

Bike and Rail 2004

Those stations which are being developed to create a destination in their own right, e.g. for shopping, dining and other activities, need to take account of how customers can be encouraged to reach the station in a sustainable manner. This is essential if demand for car access for these services is not to create competition for car parking that would otherwise be used by passengers.



Cambridge station is an exceptional case but just how much room would be taken up by a similar number of car parking spaces and at what cost?

We also want to make journeys to and from our stations simpler and greener, by providing easily accessible interchanges with other forms of transport, such as buses and bicycles.

Network Rail Corporate Responsibility Report 2011

Encouraging Cycle-Rail can open up a new market for access to stations by sustainable transport. In 2000 a report published by the European Union concluded that, when compared to walking, cycling to the station represented a 15-fold increase in the catchment area for non-motorised access. This figure is based on the distance covered by a cyclist being four times greater than someone walking to the station in the same time: it still holds true today.

In summary, encouraging Cycle-Rail has the potential to deliver a sustained increase in both network and station access. At the same time, it will also contribute to national and local government's sustainable transport goals as well as a TOC's corporate social responsibility and sustainability objectives.

It is clearly beneficial to encourage as many motorists as possible to convert to cycling, not only because it is carbon-friendly, but also because a parked cycle consumes far less space than a car. A cycle is also far cheaper to store, with a double-deck cycle rack costing about £300 compared to \pounds 6-10,000 for a new car park space.

Better Rail Stations Report 2009

Asked whether there was an alternative mode of transport they would like to use to travel to and from the station:

- 30.2% of passengers said they had an alternative means to get to the station
- 33.2% indicated there was an alternative to make their onward trip
- 9.8% said they would like to cycle to the station
- 11.2% felt they would like to cycle from the station

National Station Improvement Programme - Final Report Passenger Focus 2010

2.2 Identifying the market for Cycle-Rail

Market segmentation helps identify the target audience most likely to be encouraged to cycle to stations. Fortunately, many of those who travel regularly by train fall into those groups which show the greatest propensity to cycle. Cyclists are not a homogeneous group. In common with all passengers, their reasons for travelling will vary, as will their age, affluence and physical ability. Nevertheless, regular rail users are mostly commuters and business travellers. According to figures from Transport for London (TfL), 80% of those arriving at London rail termini from outside London on weekdays are travelling to their normal place of work.

Other types of Cycle-Rail markets should not be forgotten. Those who travel for utility and leisure purposes outside of the busiest periods also bring with them opportunities to encourage Cycle-Rail. Encouraging recreational and tourism activities in off-peak periods is a well-established practice. Promoting direct link-ups with cycle hire and cycle tourism operators may encourage new markets in new areas.

2.3 Making a business case

Any investment needs to be justified through a robust business case. It is not possible to set out the full process here, but the report Investment in Cycle Facilities at Rail Stations, prepared for the Cycle-Rail Task Force in 2009, will provide guidance. This report concludes that there is a clear case for public sector investment funding thanks to the gains in areas such as health and journey time, providing Benefit-Cost Ratios (BCRs) for government investment of between 5:1 and 18:1. For this reason, it is recommended that all profits generated by Cycle-Rail projects be re-invested in a way that will further increase this activity.

When TOCs and other bodies are developing their business cases for larger projects, it will be necessary to take into account rates of return over franchise periods, which are shorter than the whole life period of the projects. This, and other financial matters such as revenue protection and any need to repay the original investors, are not addressed here, as these will be project-specific. Individual business cases will need to be taken into consideration as part of a TOC's overall strategy for passenger growth and Cycle-Rail's role as a facilitator of access to stations (see below).

2.4 A strategy and vision for delivery

The delivery of Cycle-Rail should be embedded in a TOC's business objectives at the highest level. To ensure effective delivery, TOCs are recommended to draw up their own Cycle-Rail strategy setting out, as a minimum, clear objectives and deliverables and how they will be achieved. This should be accompanied by a robust, costed action plan setting out timescales for delivery. Recognising that staff resources will be required to draw up the strategy and see it through is the first step in this process. Experience shows that a TOC's success in this area is directly linked Over 50 per cent of the cycle market is comprised of individuals living in postcodes categorised as "urban living" and "suburban lifestyles". People in these segments tend to be well educated, reasonably well off and tend to cycle for leisure as well as for commuting to work to having a dedicated Integrated Transport Manager who can champion Cycle-Rail activity and develop and deliver effective projects. The highly successful efforts of TOCs who have taken this approach, such as Northern Rail and South West Trains, are clearly reflected in the Bike 'N' Ride report and ATOC's National Cycle-Rail Awards. Having thoroughly workedup and costed projects 'in the drawer' ready for implementation is a proven way of being successful when funds become available and bids for Cycle-Rail projects are sought by central government and other bodies.

Central London Rail Termini Report, TfL

CASE STUDY — CYCLING STRATEGY, NORTHERN RAIL

In its Cycling Strategy 2010, Northern Rail sets out an unequivocal vision of becoming the No 1 Cycling TOC in the UK by 2012. This document comprehensively sets out a planned approach to the delivery of Cycle-Rail and its recognitions of the benefits. This includes setting clear business objectives and identifying the need to generate funding to achieve them. To complete the picture, included within the planning stage is the creation of a 'Cycling Innovation Team,' charged with gap analysis and developing trials to create an evidential base for future activity.

Northern Rail



3. ENCOURAGING CYCLISTS BY MEETING THEIR NEEDS

3.1 The journey to the station

Not all of the elements that lead to an increase in Cycle-Rail will be in the gift of the rail industry, so good partnership and stakeholder engagement is essential. In common with all passengers, cyclists want direct, convenient and safe routes to the station with the minimum of delay. Routes should deliver:

- Well-signed links to and from residential areas and employment centres within an easy cycling distance (5km)*
- An encouragement to cycle by creating greater permeability and improved journey time compared with other modes*
- The removal of barriers along the route, including those formed by traffic conditions outside stations*

•Easy access to the station and cycle parking outside of the station

* Note: It is not our intention here to set out in detail what needs to be done to deliver these elements; this should be determined for each individual station via partnership working with the local highway authority and other stakeholders.

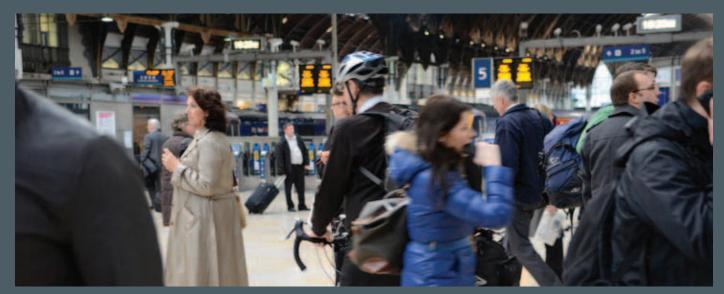


Permeability provided by cycle access to a one-way street and signs to the station

Many of these deliverables can often be realised through partnership working with local authorities and PTEs via means such as the Local Sustainable Transport Fund allocation and Local Transport Plans. In addition, local authorities sometimes have other funding available from development, which could contribute to improvements that make cycling to the station an attractive option.

3.2 Outside the station

Many stations are sited in the centre of our towns and cities. Built in an age when walking and horse-drawn transport were the norm, many face challenges when meeting the parallel needs of those who walk, take a taxi, catch a bus, drive or



Cyclists movements will often be the same as those on foot

and-ride. Adding more cyclists' to this mix means infrastructure must be in place to support other traffic should not form a physical barrier to cycle use. Solutions can be delivered through partnerships with the local highway authority and input from local user groups. The needs of pedestrians should be considered as part of the same process since benefits for each mode are often shared.

Where station approach roads are not public highway, for example if owned by Network Rail, guidance on what measures would improve access for cyclists can be obtained by partnership working with the local highway authority in conjunction with the landowner. As mentioned earlier, the local authority may be a source of contributory funds for improvements, including cycle parking, even if the station is not situated on a public highway.

3.3 Routes into and within the station

Dutch experience suggests that cycle parking is best located outside of the station as close as possible to the main entrance on the direct line of the cyclist's approach. It can also be provided within the station building or on the platform subject to any security issues (see Appendix B). For this reason, where it is necessary to pass through doors on entry to the station building, these should open automatically. Within the station, routes for access and egress, to and from cycle parking, should be step-free and provide a smooth flow that minimises interaction with pedestrians and station vehicles. In the case of the carriage of cycles within the train, this also applies to the route to the platform and in particular, through the gate line.

In common with those on foot, cyclists will want to move around the station to buy tickets, stand to read the information screens, wander around waiting for friends or rush to catch a train. Where possible, the location of parking and routes within the station should aim to minimise interaction between cyclists and pedestrian traffic at peak times. If it is not possible for cyclists to take their cycles with them when buying tickets, consideration should be given to the provision of suitable parking opportunities, such as wall anchors, bars or simple stands next to a wall, if cycles cannot be left close by within sight of their owners. In these circumstances, please be aware that there may be associated station security requirements to be met under the National Railways Security Programme (NRSP) (See Appendix B).

CASE STUDY – EAST COAST TRAINS, YORK STATION

York has a traditionally high level of cycle use for commuting and was named one of 13 'Cycle Demonstration Towns' in the UK. As part of its route-wide station improvements programme, East Coast has worked in partnership with the City of York Council to develop York Station into a Cycle-Rail hub. This has been achieved by improving facilities and access to rail services to encourage more Cycle-Rail commuting and leisure travel and, in turn, supporting the council's sustainable travel plan.

The improvements carried out at York Station have included:

- Two new ramped gateways have been installed to improve access
- Creating superior links to the National Cycle Network in the vicinity
- Working with local businesses and charities to introduce complementary facilities for cyclists in one central location

3.4 Route and facility audits

Undertaking an audit of the conditions outside the station and the routes and facilities within it will help to assess where improvements can be delivered to facilitate access and egress for those with a cycle. This is a valuable exercise in deciding where to situate cycle parking. Those teams carrying out the audits should include at least one person familiar with practical cycling issues. Riding (not within the station) and pushing a cycle during the course of an audit will help to highlight what, if any, challenges lie along the route and how they might be overcome. Working in partnership with the local authority cycling officer or members of a local cycle user group may help. Within this process, it is important to recognise if any existing cycle parking is no longer fit for purpose. This should be addressed through a quality review of what is available. Advice on good practice is provided in Chapter 4 and Appendix A of this Toolkit.

Rather than adopting a formulaic 'tick box' exercise, audits need to be tailored to both the scale of the station and appropriate cycling opportunities in the immediate surrounding area. In this way, what needs to be examined can be agreed and developed in partnership with stakeholders. A similar approach can be made by a TOC to audit the process by which cyclists are able to plan their journey to the station and beyond.

As a guide, subjects to be covered should include:

Routes to stations

- Are there strategic cycle routes from and to key destinations (employment centres as well as residential areas) within 5km?
- Are routes to the station from and to key destinations consistently signed?
- Is the potential for providing new routes and greater permeability being explored?
- Have barriers to cycling been identified and an action plan developed to remove them?
- Is information on cycling to and from the station adequate and easily found?
- Is cycling to the station actively promoted by TOCs and stakeholders, especially the local authority?

Access to the station

- Are cyclists able to gain access (and leave) in all directions?
- What measures, including cycle parking, are provided outside of the station can they be improved?
- Are there any measures that could be introduced to facilitate cyclists' use of access roads e.g. cycle lanes, tracks, contra-flow cycling, flush dropped kerbs etc?
- Can cyclists ride right up to the station entrance?
- Where cycle parking is sited outside of the station building is it on the direct line of a cyclist's approach? (You may need to consider NRSP - see Appendix B)
- Is access to the station building convenient for cyclists e.g. where doors are provided are they automatically opened by motion detection?

Within the station

- Can cyclists keep their cycles with them whilst buying tickets or seeking information?
- What facilities, including cycle parking, are provided for cyclists can they be improved?
- Is cycle parking visible, conveniently sited, signed and served by step-free direct routes?
- If steps are encountered, are wheeling channels or lifts provided?¹
- At the gate line, can cyclists gain convenient access to platforms?
- When leaving the station are major destinations signed/suitable route mapping provided?
- Is there a procedure for Cycle-Rail passengers to give feedback on their experience?
- Is there a process for consultation with stakeholders before plans go further? 2
- Have potential station security considerations been taken into account and advice sought (see Appendix B)?

Notes:

- 1 ATOC holds detailed best practice developed by cycling campaign groups on this issue
- 2 User-based insight into what works and what does not, has the potential to turn a minor improvement into a considerable success. However, it is important to keep the discussion focussed on planned improvements.

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Once suitable routes (and other measures for cyclists) have been identified and implemented, they should be added to the 'Stations Made Easy' website. Clear guidance on how to reach this site should be included within every TOC's own website.

When improvements are being considered on a 'line of route' approach, rather than 'pick off' one station at a time, it is best to get everyone involved together and visit them all within as short a space of time as possible. This allows those participating to form a consistent group who can compare and contrast different circumstances at stations along the route. It will also achieve a consistency of approach for new measures. Involving all planning authorities may also speed up the process of implementation and resolve problems at the planning stage, especially if listed building consent is required.

When implementing improvements at over 100 stations as part of a Bike 'n' Ride project, Northern Rail hired a mini bus and toured the stations with all stakeholders, planning authorities and Network Rail. In just a few weeks they had visited and discussed all improvements at all sites, which led to quick, trouble-free implementation.

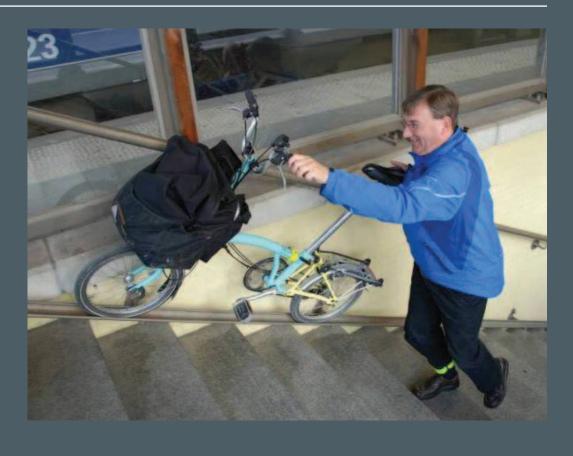
3.5 Gradients and wheeling channels

As cyclists are not permitted to cycle within station buildings, gradients that pedestrians find comfortable will be equally suitable for cyclists, especially where they meet current guidance for people with disabilities (maximum of 8% - Inclusive Mobility DfT 2002).

Where possible, routes within the station should be step-free. A station audit can establish the need for wheeling channels to help cyclists negotiate steps. These should be sited on both sides if practicable or, if not, on the right side for the benefit of cyclists going up. Suitable 'U' shaped steel channels 100mm wide and 50mm deep with a non-slip finish are a common, low cost, retro-fit solution.

The use of a wheeling channel on the inside at the approach to a right angled turn makes using it difficult at best and impossible at worst. For the same reason, channels should not be continued around corners. They should, however, run out at ground level to make it easier for cyclists to align their wheels before pushing. their cycles upwards.

Detailed specification for wheel ramps, approved by the UK Cycling Alliance and its constituent members, is available from ATOC on request.



Wheeling ramps should not obstruct convenient access to the handrail nor be located in the centre of the steps where they might form a trip hazard. Locating the wheeling ramp close to the wall minimises the trip hazard for pedestrians, but this reduces convenience for cyclists as the bicycle needs to be supported at more of an angle. This is made more difficult if pannier bags are fitted. Ideally for cyclists, the distance between the ramp and the wall should be enough to ensure that the pedals and handlebars do not clash while the bike is being held reasonably vertically, but the actual position will depend on site-specific conditions such as the width of the stairs, the handrail arrangement, and the amount of pedestrian flow.

Cycle Infrastructure Design LTN 2/08 DfT 2008



3.6 Lifts

The location of lifts should be clearly signed and they should be spacious enough to accommodate cyclists at the same time as other users with the minimum of inconvenience. Large lifts have the benefit of enabling cyclists to turn around within them to avoid reversing out to the possible inconvenience of other travellers (see Appendix A).

A good-sized lift will meet customer needs as well as operational ones

Lift dimensions should be suitable for wheelchair users and those with luggage or pushchairs giving due consideration to the volume of passengers expected to use them.

Guide to Station Planning and Design Network Rail 2011



convenient forecourt parking

CASE STUDY — SOUTHERN RAILWAYS, PURLEY STATION

The station has undergone a large regeneration programme with Network Rail, which included the station becoming step-free with the installation of lifts on all platforms.

The improved and extended cycle parking facility in the forecourt is well used and blends well with the taxi rank, drop-off point and accessibility parking. With so many modes of transport integrating on one station forecourt, it is a credit to the design that it works so seamlessly. This project brought together local stakeholders to realise real benefits for residents, passengers and the environment.

3.7 Signing

Once regular travel patterns have been established, frequent travellers become conditioned to what they have to do and the routes to be taken. This then becomes habitual behaviour and generally those concerned only want to be alerted to major changes that effect their usual travel times and/or routes. Newcomers to any station will, however, welcome clear, well thought out signing to Cycle-Rail facilities.

Signing for Network Rail-managed stations must comply with the Network Rail Managed Stations Wayfinding and Signing Design Guidelines and Standards 2010, including the provision of temporary information as required during station improvement projects.

Guide to Station Planning and Design Network Rail 2011

A range of signs can be used to direct users to cycle parking and other facilities. As with pedestrian routes, these can help users go on their way with the minimum of delay and without wandering around holding up other passengers. In the case of cycle parking, the simplest signs comprise the well understood 'P', denoting somewhere to park, combined with a cycle symbol. Where covered parking or secure compounds are provided these can also be identified by suitable pictograms (below)





Park your cycle here

This way to covered cycle parking

Other forms of directional guidance can also be used, such as that employed on the surface of a platform at Paddington Station to guide people to the car park (right).

On the roads, the responsibility for signs rests with the local highway authority. Partnership working with the authority can result in it providing suitable destination signs en-route to the station and to destinations from it; these can often be installed at the same time as cycle route improvements.

Signs on non-Network Rail managed stations should comply with the DfT's Accessible Train Station

Design for Disabled People: A Code of Practice 2011



oute marking for car users – why not for cyclists?



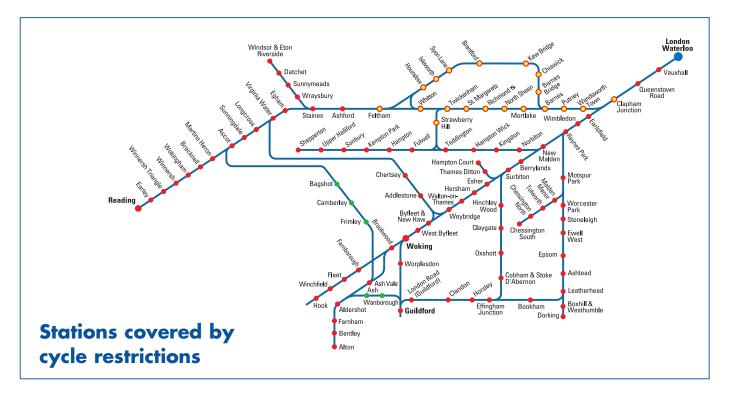
Cycle and pedestria routes to and from Peterborough Statio

3.8 Cycle carriage on trains

It is the responsibility of individual TOCs to determine their own policy of cycle carriage. Nevertheless, with an increasing demand for Cycle-Rail, a heightened demand for cycle carriage is to be expected. Where this cannot be met, the measures outlined in this Toolkit, such as secure cycle parking and cycle hire, can help to reduce the desire to carry cycles on trains. When rolling stock is being replaced or refurbished, it is important to give thought to how cycle carriage can be accommodated (see the picture of a cycle on a ScotRail train on page 21).

Folding bicycles are seen by some Cycle-Rail users as a compromise. Although it is ATOC and DfT policy to encourage TOCs to allow folding cycles on all trains, in the long term, this is unlikely to be a complete solution on the busiest services. This is because they can create competition for luggage space, and in some cases passenger space.

Where policy and suitable rolling stock do permit cycles to be carried it is essential that information about which services carry cycles, and when, is easily accessible. This information should be included in timetables, on posters and on operators' websites. Other means such as stickers setting out terms and conditions, labelling parking spaces and, if necessary, how to use them should also be used. The policy should also be clear, easy to understand and effectively communicated and all staff should be aware of it. Keeping operational personnel fully briefed on the terms and conditions that apply to cycle carriage is an important part of the picture.



Peak time travel restrictions apply from Monday to Friday at stations shown on the map above.

- At stations shown in red, cycles may not join or leave trains due to arrive at London Waterloo between 0715 and 1000 inclusive.
- At stations shown in red, cycles may not join or leave trains due to leave from London Waterloo between 1645 and 1900 inclusive.
- At stations shown in yellow/red, cycles may also not join or leave trains which are due to leave Clapham Junction between 0745 and 0900.
- At stations shown in green, cycles may be carried at any time between Guildford and Ascot.

Details of restricted trains are shown in our printed timetables.

At stations outside of this area, cycles can be taken on peak services where space permits. These services can be extremely busy and we ask that consideration is given to other passengers when taking cycles on these trains.

Even where there is no restriction, we cannot guarantee to accept cycles and spaces are allocated on a 'first come first served' basis. Our staff have the right to refuse a cycle if there is not space for it to be safely carried.

On the **West of England** route (London Waterloo to Salisbury, Exeter and Bristol), you need to reserve space for your cycle. You can do this at any staffed station, or from our **Customer Service Centre** on **0845 6000 650**. Please book at least 24 hours in advance.

CASE STUDY — CYCLE POLICY, SOUTH WEST TRAINS

South West Trains has a clear and concise policy on Cycle-Rail issues. In particular, in partnership with user groups, it has developed a useful colour-coded diagram giving details of the restrictions in force regarding carrying a cycle within a train. This appears on posters throughout the network and on stickers in individual carriages where parking is available

Cyclists taking their bikes on a train need to readily identify which carriage(s) has cycle storage. If they cannot, they may find themselves getting in the way of other passengers as they move up and down the platform looking for the right one. They may also delay departure if they have to go from one end of the train to the other.

Often cycle carriages can be identified via the pictogram on the outside. This is helpful, but it can be hard to find if obscured from view on a crowded platform. To overcome this challenge it would be better to also identify the carriages by some means that can be seen by looking along the train. One solution might be the use of coloured indicators on rolling stock above head height or at roof level, allowing them to be seen from a distance. DSB in Denmark uses a cycle symbol that covers the full height of the carriage on its 'S' train in Copenhagen.



'S' train, DSB Denmark



Cycle carriage on a ScotRail train



2.-FIT REAR WHEEL INTO FLOOR ANCHORAGE

3.-FASTEN RESTRAINING BELT AND TENSION within carriages should be easy to understand. For some users the provision of a diagram may be helpful. Spaces should also be tested with all types of cycles to ensure they are fit for purpose



Clear indication of how many cycle spaces in this carriage

3.9 Cycle hubs

'Iconic' cycle hubs can play a major role in raising the profile of Cycle-Rail opportunities. As they increase in number and become the norm at larger stations, it is anticipated that they will come to be expected by passengers; much like public bike schemes in larger cities. This will help drive demand for more and better Cycle-Rail opportunities throughout the wider rail network.

Also known as cycle centres, cycle hubs offer a range of services for cyclists including:

Core

- Secure, covered cycle parking; either self-parked or by staff (full or part time)
- Repairs
- Sale of parts and new cycles
- Free use of a pump for tyres
- Cycle hire
- Cycle information including cycle network maps, cycle security (how best to lock one's cycle), tourist information, wider travel planning and links to public transport
- Allowance for growth (not necessarily in the same location)

Added Value:

- Showers, washing, changing and WC facilities*
- Lockers for storage of clothing and cycle equipment
- Left luggage
- Refreshments (café or vending machines)
- Cycle cleaning
- Reception area and management office

*Although the absence of showers and changing facilities is often cited as a reason for not cycling, there is no clear evidence that suggests that these facilities are required part-way through a journey. The end destination, for example the workplace for commuters, is likely to be the best location for these services, particularly where a cycle is kept at both ends of the rail journey.

The term 'cycle hub' should refer to the station as a whole since it may not be possible to achieve the ideal position of having all of the services located in one place. Some of the services may even be provided by stakeholders within a short distance of the station or a nearby cycle shop.

Work undertaken by Network Rail, Cycling England and others, suggests that a station should be graded as a cycle hub within a range of 1 to 3 'stars' depending on the level of services provided. This could easily be expanded to include more basic parking provision at other stations to create a grading system that reflects the common understanding that 'five star' provision represents the very best available:

640	Cycle parking outside the station, usually in the public realm
ক্ৰুত ক্ৰুত	Cycle parking within the station with natural surveillance by staff and passengers – may include CCTV
ৰ্জক ৰ্জক ৰূক	Dedicated monitoring by CCTV of parked cycles with ready access to a nearby maintenance facility and sales, with a clear link to optional hire – may include a secure compound
জুত কুঠ কুকু কুঠ	Dedicated supervision of parked cycles with access to maintenance facility and sales with optional hire within the station boundary
න්ත න්ත න්ත න්ත න්ත	Dedicated supervision of parked cycles and the services listed above within the station boundary and accessed through a single facility all under one roof

TOCs may find such a grading system a useful way of letting customers know what kind of facilities they may expect at stations across the network. As an example, a '5-star' station will definitely have cycle hire available whilst the traveller will know to check to see if it is available at a 3 or 4-star station.



A cycle hub can be more modest in scale than the Leeds Cycle Point. Even if there is insufficient demand for a major operation, working with partners can often provide local services within the immediate vicinity or outside station premises. Leasing space within a station can help raise revenue to recoup costs or invest in further Cycle-Rail opportunities. This has been utilised as part of the business case for investment at Network Rail's London Waterloo and Victoria hubs. Undertaking a suitable trial can help determine the possible level of demand and the services that are most likely to be taken up. The station access audit can also be used to identify space or redundant buildings to house a cycle hub or secure cycle parking operated by a swipe card or proximity device; a principal that has been used effectively by MerseyRail as part of its cycle parking strategy.

When considering providing left luggage facilities at a cycle hub, TOCs should be aware that there will be associated station security requirements to be met under the National Railways Security Programme (NRSP) (see Appendix B).

CASE STUDY — LEEDS CYCLE POINT NORTHERN RAIL/ABELLIO

Leeds Cycle Point, located at Leeds Station, offers secure, fully-staffed storage for over 300 bicycles. It provides maintenance and repairs services on a 'bring in the morning, take in the evening' basis, as well as bike and accessory sales, a bicycle rental scheme, cycling information and demonstrations.

Cycle Point is an example of what can be achieved when like-minded parties come together and work in partnership. Its creation was led by Abellio (Northern Rail) with involvement from UK infrastructure operator Network Rail, local authorities in Leeds, cycling organisations and the UK government's Department for Transport.



Secure cycle parking for the public .



and businesses (hanging up a cycle is not generally recommended)

CASE STUDY – Ely cycle hub trial

In partnership with the TOC and a Cambridge cycle shop, Cambridgeshire County Council ran a series of events to test demand for a cycle hub at Ely station in 2011. These consisted of three joint cycle repair and consultation sessions. Interestingly, the first two sessions saw mostly commuter cycles being repaired but by the third, local residents began to bring their bikes along to take advantage of the services provided.

The results of the study showed that the highest demand for services provided by a hub would be cycle repairs (86%) and access to an airline or track pump (80%). Next came the purchase of accessories and secure cycle parking (62% and 60% respectively).

The conclusion of the study was that there was likely to be sufficient demand for a part-time cycle repair operation to be set up. As a longerterm approach to providing a cycle hub, two redundant buildings were identified that could be converted to house this operation.

In addition to the TOC, cycle hub activities can be operated by private individuals, social enterprise organisations or charities. One example of an off-site cycle hub is the London Bridge Cycle Park close to the surface and underground stations. Transport for London (TfL) developed the hub in a disused railway arch in partnership with Southwark Council and the operators. It offers 440 secure cycle parking spaces, storage and changing facilities. It is unusual in that it also offers parking to local businesses, which can block-book parking for their staff. Businesses are often motivated to fund such measures as a way of meeting their planning obligations, and this can be a useful source of funding.

CASE STUDY – CYCLE REPAIRS AND HIRE, FIRST GREAT WESTERN, OXFORD STATION

Providing a useful service does not necessarily mean that there has to be a massive investment in property. Working in partnership with a local cycle shop and hire operator, Bainton Bikes has, First Great Western now has a cycle hire and repair facility operating out of a gazebo in a car park at Oxford Station.

This has proved to be a help to commuters who find that their daily travel to London means that they usually leave at 7am and return at 7pm. This leaves no time to visit a cycle shop. Bainton Bikes have responded by opening at 6:30am and closing at 7:30pm.

Service has been sufficient to justify taking on an extra member of staff to cope with demand and now Bainton Bikes open seven days a week offering cycle hire and tours at weekends.

It should be recognised that cycle hubs will not meet everyone's needs. There will also be some cyclists who are only casual users and others that do not wish to register or pay to use the facilities provided. Additional cycle parking will be required to meet their needs in order to encourage and maximise cycling to the station.

3.10 'Bike at Both Ends'

In response to not being able to carry their cycles on a train, many regular passengers in parts of mainland Europe opt to keep a cycle at both ends of the rail journey. Making use of two cycles in this way is an increasingly common, if not always fully recognised, phenomenon in the UK. This practice is not confined to major metropolitan stations and accommodating it within adequate cycle parking provision at all stations should be seen as a key element of Cycle-Rail, especially if cycle carriage is restricted by a TOC.

The Dutch have also encouraged cyclists to keep a cycle at both ends of their journey to discourage cycles being taken onto crowded trains.

Better Stations Report 2009

One disadvantage of keeping a cycle at the 'far end' of a journey is that the cycle is often of low quality and poorly maintained. This can be a response to a fear that the cycle could be stolen, indicating that security is a paramount consideration for cyclists when leaving their bikes at stations. Poor maintenance may also be a result of not being able to devote time to look after the cycle properly, or not wishing to carry the necessary tools. Providing cycle repair facilities at cycle hubs can help meet this need.



Work stand and tools



Public tyre pump



© Statoil

CASE STUDY — 'CYCLE CARE', STATOIL FILLING STATIONS, COPENHAGEN

Although not a Cycle-Rail case study, the example of Statoil in Denmark can provide a useful lesson. This company has seen the benefits of providing cycle care and repair opportunities at the convenience stores associated with its filling stations. It clearly recognises the commercial benefits of encouraging the many cyclists in this 'City of Cyclists' to make short trips to those stores in preference to other retail outlets.

The facilities comprise a fold-down stand, an air hose, plastic gloves, a water hose (to wash the cycle) and the opportunity to borrow a range of tools from the store.

TOCs wishing to follow this example need look no further than UK suppliers of suitable equipment who provide suitable work stands with a range of tools attached, as well as public tyre pumps that need only human effort to power them. These products would complement cycle parking provision on any station or within a secure compound. Some of these ideas have already been incorporated into stations including Leighton Buzzard.

3.11 Cycle hire

Cycle hire can make a valuable contribution to enhancing the end to end journey experience. Although often seen as a tourism resource in the UK, in many parts of mainland Europe it is an accepted part of the onward journey. As Cycle-Rail facilities at stations grow, especially cycle hubs, it is to be expected that a similar pattern will emerge in the UK. Hire needs not just be for one day at a time but can be for longer periods and included in promotions to reward season ticket holders.



CASE STUDY — CYCLING STRATEGY, 'OV-FIETS', THE NETHERLANDS AND DB 'CALL A BIKE', GERMANY

A wholly-owned division of Netherlands Railways since 2008, OV-fiets is the largest cycle hire provider in the Netherlands. It provides a standardised web-based system of cycle hire at almost 250 rental points (50-50 staffed and self-service). These can be found at railway and bus stations, underground stops, city centres and park-and-ride sites. Payment is by subscription, attached to the national public transport smart card, and users may hire for short periods or longer, with the average rental period being eight hours.

Options for hire also include electric cycles and scooters. Business interests are catered for via corporate subscriptions for individuals who can then use the cycles for work travel and commuting, either within a city or as part of their onward rail journey. A similar concept is shortly to be rolled out in England by the Abellio Group of operators.

In Germany, rail operator Deutsche Bahn also provides cycle hire, which is unusual in that cycles are distributed all over a city and the starting point is wherever the last user left the cycle (the system asks that they be left at major junctions). The hire process relies on use of a mobile phone to obtain a code to unlock and return the cycle.



CASE STUDY — Brompton bike initiative, south west trains, waterloo station

South West Trains and Brompton Bicycle launched a partnership in 2009 with the intention to get more people onto their bikes to and from rail stations. South West Trains invited a number of its season ticket holders to take part in a free three-month trial, in which they were provided with a folding cycle bike. The bikes were cleaned and checked by South West Trains staff, and the more significant maintenance issues dealt with by a local cycle business. A key factor in the success of the scheme is the Lost Property Office staff at Waterloo; they are responsible for carrying out the bike checks and are the principal point of contact for potential hirers.

A total of 50 cycles have been purchased by South West Trains. They are all painted in South West Trains livery with the logo on the frame.

Following on from the successful trial, South West Trains has now introduced a chargeable scheme. This scheme is open to all users but season ticket holders enjoy a discounted price.

The scheme has proved extremely successful with all of the cycles on hire to rail passengers. South West Trains has received many positive comments from passengers who have made a change from using the car to using their folding cycles.

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In time, it is expected that cycle hire at stations will benefit from the PlusBike integrated ticket system being explored by ATOC. This will permit cycle hire to be booked ahead in exactly the same way as the PlusBus system. One advantage of such an arrangement is the removal of the need to carry a cycle, which is more convenient for the individual and reduces pressure on passenger or luggage space on the train.

An ATOC survey of close to 1500 rail users travelling to an unfamiliar station revealed that around a third would consider the use of a combined rail and cycle ticket.



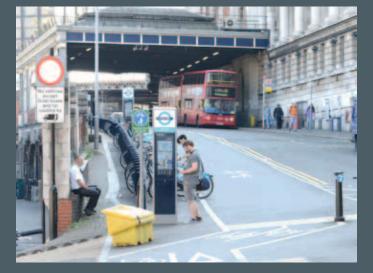
CASE STUDY – BROMPTON DOCK PILOT, SOUTH WEST TRAINS, GUILDFORD

South West Trains worked in partnership with Brompton Dock to deliver an innovative folding-cycle hire solution at its Guildford station. The self-contained solar-powered dock is a vending machine for folding-bike hire, which can hold up to 40 folding cycles. Brompton Dock manages the scheme and Virgin Trains has also implemented this facility at Manchester Piccadilly.

The project has proved popular with users and is self-financing once around 30% patronage is achieved. Additional bicycles can be added to the hire system, with up to a maximum of 120 for a 40-bay dock.

3.12 City-wide cycle hire schemes

The opportunities presented by cycle hire schemes operating in the vicinity of stations should also be recognised. Where such schemes are available, their presence and the location of the closest sites should be promoted and signed from within the station.



Barclay's Cycle-Hire scheme outside Waterloo Station



Cycle hire provided by a local Business mprovement District (BID) programme butside Newcastle Station

CASE STUDY – CYCLE HIRE DISCOUNT

ScotRail has entered a partnership to bring the benefits of discounted cycle hire to rail customers. It has teamed up with cycle hire company Ticket to Ride to offer deals enabling rail travellers to get into the saddle for less, and explore the Scottish Highlands around Inverness.

A 10% discount on cycle hire is available on the production of a valid rail ticket, with a 15% discount available to holders of the Freedom of Scotland Travelpass. The hire company will bring a bike to meet customers when their train arrives at Inverness, Nairn or Forres stations, at no extra charge. Cycles can also be taken to other selected stations in the Highlands including Dingwall, Elgin and Aviemore.

4. CYCLE PARKING

4.1 Basic principles

The subject of cycle parking has been given its own chapter because this is right at the heart of encouraging Cycle-Rail. Getting the cycle parking right is key to giving users the confidence that their cycle will be there on their return. Without this confidence, cycling to a railway station will often be disregarded by those who might otherwise be attracted to Cycle-Rail.

As an added benefit, good quality, secure cycle parking can help to reduce the demand for carriage of cycles on trains.

A number of factors govern the effectiveness of what is provided but the single most important issue is convenience.

- Cycle parking should be visible and conveniently sited as close as possible to entry and egress points without compromising the needs of other passengers, station operations or station security considerations (see Appendix B). When located outside of the station it should be closer than any non-disabled car parking.
- Access routes to the parking should be convenient without unnecessary detours or flights of steps. Inconveniently-sited parking will be ignored in favour of locking cycles to railings or other structures, which may lead to them getting in the way of station operations or other users.
- The parking stands should be convenient to use and enable the frame and at least one wheel to be locked.
- The parking should be covered, well-lit and have CCTV and, where practicable, be located in a secure conveniently-sited compound (see Appendix B).
- For the convenience of cyclists as passengers, information screens should ideally be visible from the cycle parking areas.
- The needs of all users should be recognised and where two-tier parking is introduced, low-level parking should be provided for the convenience of those who are unable or unwilling to lift their cycles.
- For the convenience of users, parking should be free of charge wherever possible.
- Information provided for the benefit of users of compounds, lockers or any system that requires key operation should be convenient to find and act on.

4.2 What works

There is no one size fits all solution. The level of demand for parking, the space available and the type of facilities provided will vary with local circumstances. This

means that a small station might have a relatively high demand but a larger one less so. Providing sufficient parking may also take up a greater proportion of space available on a smaller station compared to a larger one.

Where there is space, the preferred parking solution is a 'Sheffield stand' This is cheap, simple to install and maintain, parks two cycles to one stand and is liked by users so long as they are not placed too close together. Stands that are not far enough apart for convenient use may look full but, on closer inspection, will usually only have one cycle at each stand. Where compromises must be made due to restricted space, and the distance between stands is less than the recommended minimum of 1m, then it must be demonstrated that two cycles can be easily accommodated (see appendix A).

From a cycle security point of view, the Sheffield stand enables the frame and at least one wheel to be easily locked to it. They can also be finished in a range of colours to match a TOC's livery to help make a statement about its commitment to Cycle-Rail.



Covered Sheffield stands at Bedford Station

Sheffield stands can come in rows fitted to a base rail. These are commonly referred to as 'toast racks' and can be free-standing if required. Those with flat bottom rails are preferred as this makes parking easier and they are less likely to trap litter. Where individual stands are bolted down (see Chapter 4), tamper-proof fixings should be used to prevent the stand being unbolted in order to steal the cycles locked to it.

A good idea but bad in practice: a 'toast rack' with its stands too close together, eaving room for only one bike per stand. Note how the thick rail also traps litter



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Two-tier parking systems are becoming more common in response to higher levels of demand for parking and where a higher density is needed. When first introduced, they should be accompanied by readily-understood user instructions. Users of the upper levels should be helped by gas or spring assistance to raise and lower the cycle. To provide effective security, both upper and lower tiers should be fitted with a bar that enables the frame and at least one wheel to be secured.



Two-tier cycle parking outside Waterloo Station



This variety of two-tier parking has a rail that allows both the frame and front and rear wheels to be secured.

Cycle parking is a constant source of design innovation resulting in many variations on a common theme. Some Sheffield-type stands are 'M' shaped to encourage cyclists to lock the frame and a wheel whilst resisting the ability to turn the cycle in order to break the lock. Other stands make a positive visual impact which help to raise the profile of cycle parking and Cycle-Rail.



A very positive statement but some cyclists may prefer not to lift their cycles however easy it might be.

4.3 What does not work?

Any kind of stand that grips only the front wheel should never be used. This type offers no support if a cycle is knocked or falls. If this happens, the wheel will become buckled or greater damage occurs. In addition, this type of stand does not provide any means to secure the frame and greatly reduces the security of the parked cycle. Locking the front wheel can also be very difficult if the adjacent stands are in use.



The worst of all worlds - lifting a cycle into a 'wheel grabber' - the wheel lives on long after the cycle has been stolen. Note how other cyclists attach their cycles to the frame of the parking rather than use the very substandard provision



Some stands look good in the public realm when not in use but do not provide adequate support and security. They can also pose a threat to pedestrians with vision impairments



4.4 Covered stands and compounds

Most demand for cycle parking at rail stations will be for long-stay (6-12hrs) and should be covered to protect cycles from the elements. When deciding where to site covered parking, the effects of prevailing winds should be considered, as many shelters provide only a modest degree of protection from anything other than rain falling straight down.

Additional security can be provided by siting parking within covered compounds with access controlled by an electronic device such as a key-fob or swipe-card. Such systems can be used to monitor parking activity and provide valuable information on the level and times of use. UK and Dutch experience suggests that twice as many keys as cycle stands can be issued because of users' different travel patterns. All systems of registration and key issuing must be easy to find out about and take advantage of. Agreements with users should aim to be concise and easily understood by all parties and subject to the renewal of registration on an annual basis.

Keypads are not recommended, as the combination can be shared and it can be difficult to notify all users of changes to the combination. Compounds should preferably not have openings large enough to pass a dismantled cycle through as thieves will often identify and make use of such weakness despite the presence of CCTV.

CASE STUDY — Secure compound, southport, merseyrail

Mersyrail has built a number of secure cycle parking compounds with swipe card access as part of its Go Cycle project. A hire and repair service is also provided at Southport.



Secure compounds need not be purpose built but can often be created by installing cages below existing buildings or roofs. They should, however, have good natural surveillance into and out of the facility, no hidden areas or places where offenders could hide and they should be well lit. Where it is not practicable to provide covered parking, this should not preclude the provision of non-covered stands.



Covered but no protection from the rain? Parking facilities have been moved here to take advantage of a more sheltered position



CASE STUDY – COLCHESTER STATION, NATIONAL EXPRESS

As part of its travel plan for Colchester Station, National Express in partnership with Colchester and Essex County Councils created a secure compound under an existing car park. The use of the compound is available to those who register for the scheme.

4.5 Lockers

When considering installing cycle lockers (or any other cycle storage) at a rail station, TOCs should be aware that there may be associated station security requirements to be met under the NRSP (see Appendix B). Details of how to hire lockers should be clearly set out at the point of use. Agreements with users should be simple to understand and station staff instructed on the process of hiring, inspecting and maintaining lockers.

4.6 Electric and odd-sized cycles

Electric cycles are becoming ever more popular and demand for suitable parking facilities can be expected to increase over time. These cycles are generally heavier than most because of the weight of the battery and electric motor. The motor is often housed in a wheel hub, which can make them more cumbersome to manoeuvre and, for some users, impossible to lift. In much the same way as demand for parking cycles with trailers will increase, space and secure fixings should be provided for these users. For electric cycles, this is best achieved by installing more wide-spaced Sheffield stands (these cycles often have built-in stands which users will wish to use as well) or suitable wall anchors or bars. It may be necessary to inform other cyclists that certain stands are reserved for users of electric cycles, tandems, cargo bikes and cycles with trailers.



An electric cycle with the battery on the rear carrier and the motor in the hub of the rear wheel



Wall bar

4.7 How much cycle parking to provide?

Investment in Cycle Facilities at Rail Stations sets out a cycle parking demand forecasting model which helps create an indicative level of demand, and hence costs, based on the following steps:

- 1. Define the cyclists' catchment areas for each station;
- 2. Analyse catchment populations;
- 3. Calculate rail trip rates;
- 4. Calculate potential cycle mode shares;
- 5. Estimate annual volume of cycle trips; and
- 6. Convert cycle trips to cycle parking spaces.

As many stations will already have some form of parking; official or unofficial, a pragmatic approach can often be adopted. This entails counting the number of parking positions currently available, the level of parking use and the number and location of 'fly parked' cycles within and around the station. These figures can give a ready idea of the number of spaces to provide as a minimum plus a 50% allowance for growth. Experience suggests that when there is a good supply of cycle parking this encourages more users, so, as a rule of thumb, when monitoring reveals that 80% of the spaces are full, another 20% should be added.



A sure sign that there is not enough parking provided

4.8 Respecting the character of the surroundings

Cycle parking facilities within the public realm should be chosen to complement their setting. They should be of sufficiently high quality, in terms of specification and visual appearance and in keeping with the context of the station concerned. Many hundreds of railway stations in the UK are individually listed Grade II. Some thirty stations in England alone are listed at the outstanding national interest grades of I and II*, locally listed or lie with a conservation area and so are of significant historic and architectural interest. The provision of cycle facilities such as cycle stands, secure docks, compounds, lockers and repair enterprises on station forecourts, platforms or within existing station car parks are, of course, usually far less obtrusive than car parking but all do require very careful consideration to ensure that they do not detract from the character, appearance and integrity of these national landmarks.

4.9 Buyer beware

When purchasing any cycle parking equipment it is essential that tenders are scrutinised to ensure that what is offered is on a like-for-like basis and include supply, delivery and installation. For example, specifications of Sheffield stands should be checked to compare wall thickness and finish. In the case of two-tier stands, the nature of construction, finish and lifting mechanism should also be compared. Whenever possible seek, and follow up, references from satisfied customers within the rail industry as part of the procurement process. Reputable suppliers will usually have arrangements with installers who are certificated for work within the rail environment.

4.10 Cycle security

All Cycle-Rail facilities must be safe to access by cyclists when parking their cycles or returning to collect them. This access must be safely integrated with local road and pedestrian traffic and the use of station vehicles.

Cyclists should be advised to minimise the likelihood of theft by using good quality locks and securing the frame and at least one wheel to the stand. Locking only the front wheel should be discouraged as this means that the rest of the cycle can easily be removed with simple tools. Suitable advice can be given by means of posters within the cycle parking area.

Cyclists should be advised not to leave their cycles at a station for longer than is necessary as they could become targets for thieves. They should also be encouraged to get their bikes cycle marked by the Police.

It is often the case that cyclists will leave one lock, usually the heaviest, behind to save taking it home with them. The provision of rails along the side of shelters as lock hangers can provide a useful feature and keep the stands free of unused locks. This also makes them easier to remove should it prove necessary to dispose of abandoned locks.



Useful advice on the type and number of locks to use

All cycle parking measures, particularly those outside a station building, should also take account of the need to 'design out crime' by reference to Section 17 of the Crime and Disorder Act 1988 and its requirement to "do all that it reasonably can to prevent, crime and disorder".

Generally the latter can be achieved by ensuring that all measures are:

- Safely accessible
- Well lit
- Visible
- Subject to natural surveillance
- Capable of being supervised and inspected by staff at any time
- A discouragement to vandalism and crime, substance misuse, anti-social behaviour and any behaviour that adversely affects the environment

If in any doubt about cycle crime reduction measures, rail staff should contact their British Transport Police Crime Reduction Officers via: FHQCrimereduction@btp.pnn.police.uk

5. COMMUNICATION STRATEGIES

5.1 Marketing and promotion

The level of take-up of Cycle-Rail services and facilities provided as part of the end to end journey will be largely dependent on the way in which they are presented to potential users. Marketing is the process of seeking to understand passengers as customers, what motivates them and how to present them with relevant reasons, and opportunities, for doing something. Promotion is the means by which these opportunities are 'sold' to them.

Having used this document to decide which Cycle-Rail services to provide and where, the next stage is it to ensure that they are promoted in the most effective manner. This should not be confined to existing and future customers of Cycle-Rail but include all personnel within an organisation. This will create knowledge and ownership and thereby deliver a more customer-focussed service. Regular staff briefings and updates on Cycle-Rail are an important part of this process.

5.2 Internet

Regular passengers are likely to be familiar with their journeys and generally only check online to make sure that train times remain the same. Research for ATOC shows that 60% of passengers visiting an unfamiliar station planned their onward journey and of these 86% used on-line information (includes mobile devices such as smart phones). This, therefore, represents the most important source of information for many passengers on:

- What services are available at stations
- Where they are provided (on the station) including routes within the station
- Taking a cycle on a train including what train services, restrictions, terms and conditions, the nature of the in-carriage facilities (dedicated parking areas)
- Terms and conditions for cycle parking
- Information on cycle routes to/from the station

It is essential that a TOC's website not only contains all of this information, but it should also present it in a way that those who had not considered Cycle-Rail, are alerted to the full range of services available. Just having the facts on the website is not enough.

Ease of access to internet information should be tested by having someone who is not familiar with the service look for it and give feedback on the experience. This is a vital way of determining the transparency and legibility of information provided. The site must also be kept up to date to maintain customer confidence in the content.

5.3 Other means of promotion

These can be divided into on-station and off-station as follows:

	On-station	
Hoardings and posters	ATOC research reveals that those visiting an unfamiliar station had a 75% confidence level in the information provided on posters and 81% confidence in maps provided. To maintain this level of confidence it should not be taken for granted that, maps are the most up to date available. These should be updated regularly.	
	Where posters or signs set out terms and conditions for such facilities as cycle parking they should be placed in a prominent position to reduce conflict and complaints when it becomes necessary to remove abandoned cycles.	
Staff	Staff are one of the best promotional assets and should be regularly briefed on the facilities available and how to get the best out of them.	
Handouts	These can take the form of leaflets giving details of the Cycle-Rail facilities available at the station and on the line of route and maps of utility and recreational cycle routes in the local area. 'Giveaways' can be used as part of an individual promotional campaign.	
Promotional events	Launching a new facility as a 'good news' story in partnership with the local authority and other stakeholders that attracts press coverage can have a wide- reaching effect. These events should not take place just when it is convenient for the press to call but throughout the day to reach passengers at peak morning and evening travel times. A range of supporting promotional activity should run throughout the year.	
	Since an origin station for one passenger is a destination for another, promotion should take place on a line-of-route basis to engage the biggest market.	
	Off-station	
Campaign specific	Successful campaigns have used the following: • Bus shelters • Bus backs • Hoardings • Press adverts • Direct mail • Internet.	
Social media	The use of social media to create a 'community' can help support existing users as well as those who might be encouraged to adopt Cycle-Rail. It can also provide a means for success stories to be shared in a 'viral' form. With regular monitoring it can help to identify issues that need to be addressed and, if necessary, shared with the local authority where problems such as potholes are reported.	



CASE STUDY — Go Cycling, Merseyrail

Merseyrail undertook a conscious 'line of route' approach when launching its Go Cycling project. This included secure cycle parking controlled by swipe card together with individual helmet lockers plus a cycle hire and repair service at its Southport flagship site. To reach the widest possible audience, propositional activities comprised:

- Posters on hoardings at stations
- Giveaways
- Advertising on bus shelters and bus backs
- Direct mail
- Press advertising
- Internet
- Roadside 48-sheet hoarding

6. MONITORING AND MAINTENANCE

6.1 Monitoring

Once you have introduced your Cycle-Rail measures and services, it is essential to monitor their use. For example, tracking the number of cycles parked before the provision is increased / improved will set a base line and enable an initial evaluation of the take-up. Repeating surveys at regular intervals thereafter will provide an indication of progress towards targets set for increases in use. Surveys of users will also help determine whether what is provided is meeting their needs and where improvements can be made. Positive outcomes help to make the case for further investment.

Working in partnership with members of the local cycle § and other stakeholders can often identify volunteers to take part in surveys or cycle parking counts. This can reduce the need for staff time and give a sense of ownership to those keen to see Cycle-Rail succeed.



Measure how much is it used, by whom and do they use it properly – is more parking needed?

6.2 Maintenance

Regular inspections should be carried out to ensure that all facilities provided are in good condition, clean and have not been damaged in use. Where cycle parking is situated outside of a station building, particular efforts should be made to keep smokers away from shelters. Failure to do so will result in dirty and unpleasant conditions that may deter use and regular cleaning is essential.



The maintenance of cycle parking areas should include the removal and disposal of abandoned cycles and TOCs should have a written policy around recovered/ removed bikes and what to do with them. When cycles are removed and initially held in case their owners return and claim them, they should be stored securely so that they are not subsequently stolen whilst in the care of the TOC. Cost-free disposal can often be achieved through partnership working with the local authority and cycle-recovery charities. Abandoned cycles can often be a problem when students leave town at the end of their studies. Removal is best carried out on a 'little and often' basis to avoid overloading the charities and creating storage problems.

The right to remove and dispose of cycles, including those improperly parked, should be set out in the station's terms and conditions of use and clearly displayed in parking areas. This will minimise challenges in the event of a dispute. Cycles to be removed should be subject to an appropriate notification period and identified as such by a suitable note attached to the handlebars. Where cycles are parked in an inappropriate place, there may be associated station security requirements to be met under the National Railways Security Programme (NRSP). Refer to Appendix B for further sources of advice and information.

In such a state this facility is hardly an encouragement to use

6.3 Sharing success

Where new and innovative approaches have been found to be successful, the experience should be shared across all rail networks. This can be readily achieved by submitting projects to the annual National Cycle-Rail Awards, presented by ATOC.



Terms and conditions for use of cycle parking are clearly set out in this Network Rail poster, including the statement "Abandoned bikes will be removed and stored for two weeks before being donated to a local charity"

This sign also points out that panniers and bags should be removed from parked bicycles. Where panniers and bags may be left on, signs should make it clear that they must be left open for easy inspection by station personnel.

Where it is felt necessary to register and identify individual cycles and their owners, this can beachieved simply by means of a durable plastic tag.





Chiltern Railways' season ticket holders may leave cycles in these racks without charge. A registration tag is required, obtainable from the Information kiosk. Cycles without tags or those which appear abandoned will be removed. Cycles are left at owner's risk

Chiltern Railways

7. WORKING IN PARTNERSHIP

7.1 **Potential partners**

Throughout this document, mention has been made of the benefits of working in partnership to achieve effective implementation of facilities and the delivery of Cycle-Rail services. Potential partners and the benefits they bring are summarised below::

Partners	Benefits	
Central government	Sources of funding and guidance on issues such as cycle storage and associated station security considerations.	
Local government	Sources of funding, guidance and the delivery of improved cycle routes to stations as well as contributions to cycle parking, either within or outside the station and promotional events. Local authority websites can also provide information on routes to stations and generally promote Cycle-Rail. They can also provide valuable support for a cycle forum.	
Network Rail	Sources of funding and guidance.	
Passenger Transport Executives (PTEs)	PTEs have their own funding allocations which can be made available for Cycle-Rail projects. Involvement in setting priorities for funding and promoting the development of new train services.	
Community Rail Partnerships	Impartial support and guidance.	
British Transport Police and local police force	Guidance on station and cycle security including anti-theft promotional events.	
Cycle retailers	Delivery of services (as sub-contractors operating cycle hubs or hire) and promotional events e.g. 'Dr Bike' and 'try before you buy' sessions.	
Non governmental organisations (NGOs)	Bodies such as Sustrans, the transport charity, may be able to help with some Cycle-Rail projects including improvements of routes to stations and links to the National Cycle Network (the National Cycle Network now passes within 500 metres of more than 1000 stations across the UK). The CTC and UK Cycling Alliance (UKCA) may be able to help with technical advice and local contacts.	
Social enterprise and voluntary organisations	Delivery of services (as sub-contractors operating cycle hubs or hire).	
Local cycle user groups	Input into local cycle route improvements, cycle parking, promotional events, assistance in surveys, monitoring and feedback on the success of Cycle-Rail measures. Can also play a role in the administration and organisation of a cycle forum.	
Local cycle forum	Often organised/supported by the local authority and drawn from many of the organisations listed above, these can offer valuable guidance, feedback and support for Cycle-Rail activities. They may also be willing to help with user surveys and station audits.	
Individual Cycle-Rail users	Feedback from individual users can be invaluable in making sure that what is provided actually meets their needs. In particular, surveys and interviews that follow up the introduction of new facilities can help demonstrate their worth and provide early identification of any operational snags.	

CASE STUDY — CYCLE FORUM, NORTHERN RAIL

Northern Rail's approach to stakeholder engagement is a well-known best practice example. The Northern Rail Cycle Forum meets three times a year, it has 35 regular attendees and was responsible for delivering Northern Rail's Cycling Strategy. The Forum has helped support the following activities:

- Secure cycle parking at 111 stations around Leeds
- The Summer Series local marketing campaign at eight stations (involving 50 organisations and many more volunteers)
- Through the Summer Series, it surveyed more than 350 people to identify barriers to Cycle-Rail issues
- Working in partnership with St Ambrose College, the Mid-Cheshire Community Rail Partnership and Northern's conductors introduced the first school registration scheme to ensure pupils can take their cycles on the train to school
- Leeds Cycle Point was delivered with partnership and support from Network Rail, Abellio, Northern and Metro



APPENDIX A: CYCLE PARKING DIAGRAMS

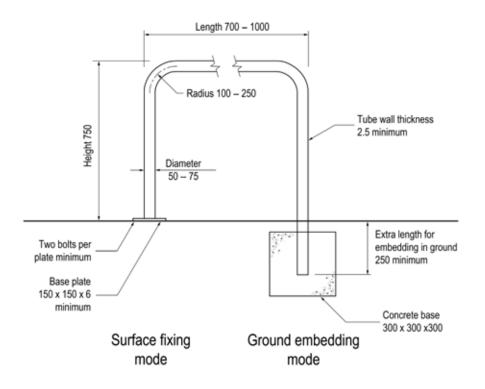
All diagrams © Transport Initiatives (except Diagram 1)

(All dimensions in mm - not to scale)

The following drawings are intended to help with the design of any Sheffield stand layout. These stands are featured because they are almost always the best solution: they are cheap to install and maintain and each stand can park two bikes (one on either side). Where appropriate, the drawings also include adequate space to ensure clearance from passing pedestrians and other site traffic. The manufacturers of two-tier parking equipment will be able to help with the layout of their products and may even be able to offer a design service.

Large areas of parking can benefit from being broken up into defined sections with the use of colour or numbers. This will help users remember where they left their cycles.

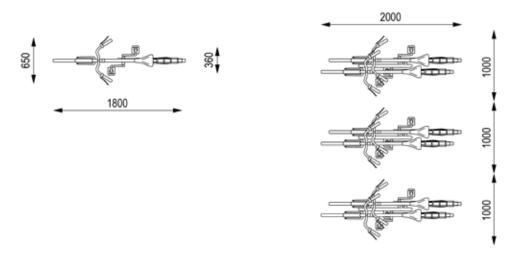
Diagram 1: Basic Sheffield stands



Notes: Based on London Cycling Design Standards – A guide to the design of a better cycling environment, TfL 2005

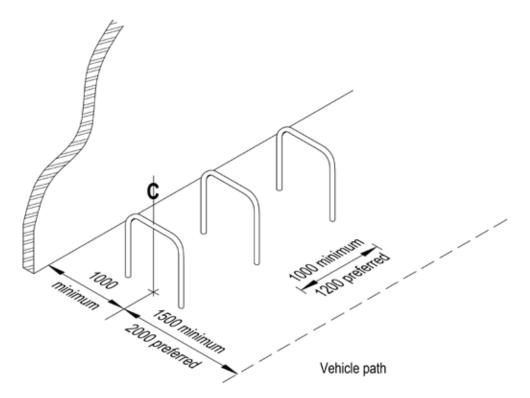
When identifying space for bikes, it is worth being aware that they are, on average, 1,800mm long and 650-700mm wide, depending on handlebar width. When two bikes are parked either side of a single stand they should be staggered to avoid a clash of handlebars or pedals. This creates a footprint of 2,000mm x 1,000mm. This dimension is useful in determining how much space is needed.

Diagrams 2 & 3: Bike footprints



Note: When being pushed, the overall width of the bike and cyclist increases to roughly 1,100mm.

Diagram 4: Stands at 90° to wall or building line and passing vehicles



Note: The preferred distance from passing vehicles is 2,000mm. This may be reduced to 1,500mm where a kerb separates the cycle parking from site traffic.

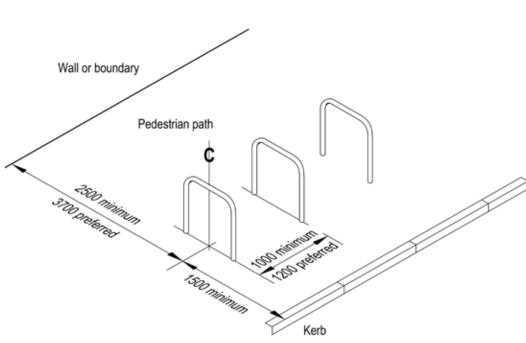
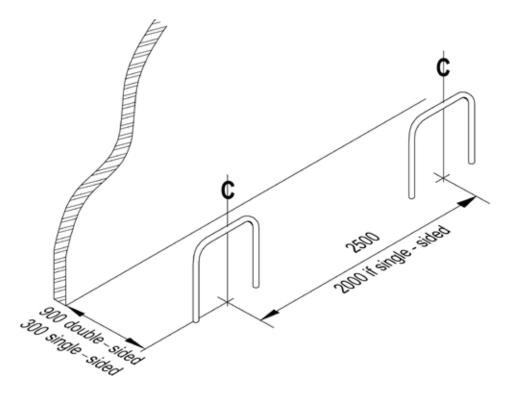


Diagram 5: Sheffield stands at 90° to pedestrian path and passing vehicles

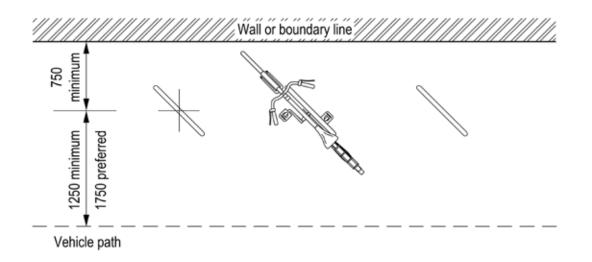
Note: The preferred distance from passing traffic is 2,000mm where there is no kerb.





Note: 'Distance from wall' dimensions also apply when the stand is the last in a line of several at right angles to the wall (i.e. each stand is parallel to the wall). The recommended minimum distance quoted allows cyclists to attach their locks more easily. Where single-sided parking along a wall is being considered, a cheaper alternative could be the use of wall bars or anchors.

Diagram 7: Stands at 45° to wall and passing vehicles



Note: The preferred distance is 1,750mm from passing vehicles. This may be reduced to 1,500mm where a kerb separates the cycle parking from site traffic.

Diagram 8: Stands at 45 degrees to kerb and pedestrian path

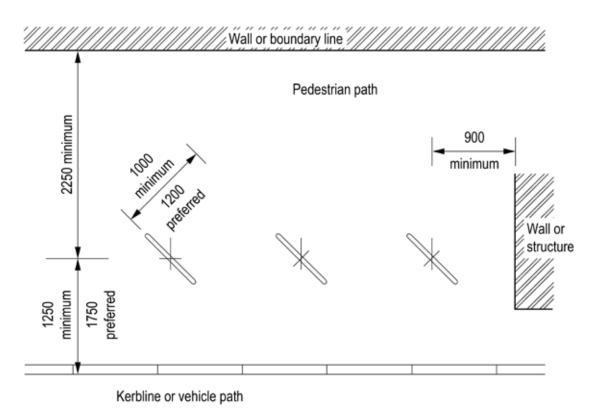
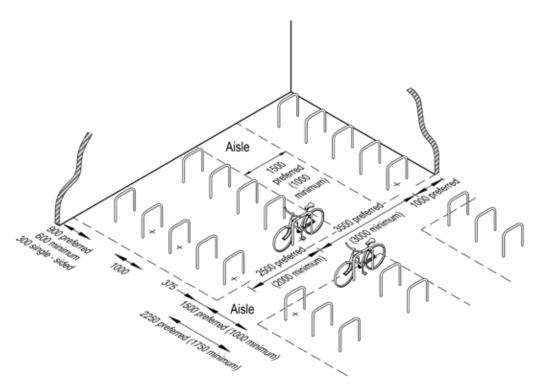


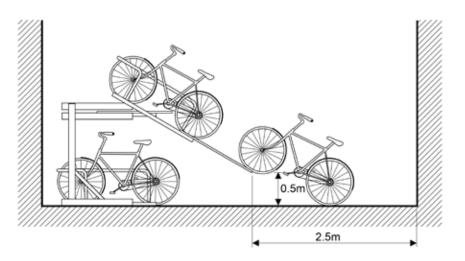
Diagram 9: Aisle widths



Note: Should it prove necessary to compromise on aisle width or any other dimension, for example for an irregularly shaped site, it is essential that the proposed layout is tested to ensure that it works in practice (assume 1,800mm x 650mm per bicycle).

Where large numbers of bicycles are parked, it is recommended that the aisle widths be increased (at least doubled) to allow cyclists to pass in comfort.

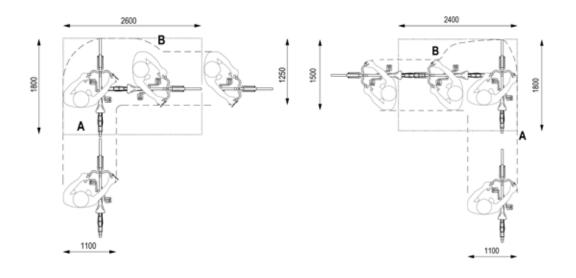
Diagram 10: Two-tier stands



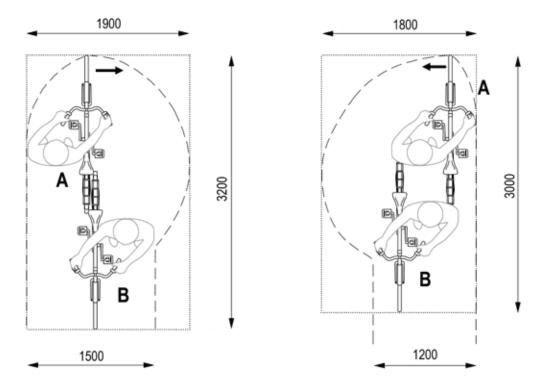
Note: manufacturers/suppliers are able to provide detailed advice in installation and layouts

Bike footprints – access, movement and turning (all dimensions mm)

Diagram 11 (Left): Cyclist on the left hand side of the bike turning right Diagram 12 (right): Cyclist on the left hand side of the bike turning left



Diagrams 13 & 14: Cyclist turning through 108° to left and right



Note: These diagrams (11 – 14 inclusive) may be reversed to allow for a cyclist with their bicycle on their left

APPENDIX B: WIDER SECURITY ISSUES

Kindly provided by DfT's Land Transport Security Division

Station Operators' security obligations

DfT sets and enforces counter terrorist security measures on the national domestic railway network. As it is an open system carrying large numbers of passengers to and from thousands of stations, the aims are to reduce risks whilst allowing people to travel freely. Protective measures are to be proportionate to the threat without impacting unduly on the industry's ability to operate a public transport service. Station and train operators have legal obligations under the National Railways Security Programme (NRSP), and a Nominated Security Contact (NSC) who is a key communication channel with DfT and other stakeholders on the railway security regime.

How does this affect cycles and their storage?

Key NRSP security measures include assisting with this detection/deterring of terrorists and limiting areas of potential concealment. The NRSP therefore contains measures relating to bicycles and their storage at railway stations, including on the provision and siting of bike parking facilities, security checking, and references the removal of cycles that have not been left in the appropriate parking facilities. The precise requirements for new cycle installations will vary according to what these are and the stations' individual circumstances, and in certain instances these are mandatory. There are also station security requirements for the searching of left luggage, which will apply to facilities provided at rail station cycle hubs.

I'm planning a new cycle initiative – what should I do?

If you are planning a new cycle initiative at a station, please be aware from the outset that there may be associated security requirements to be met, and that it is best to factor these into your plans from the start, saving you time, money and effort. The following people can help and guide you with specific advice at the start of the planning/design process:

- Your NSC
- DfT Rail Security Compliance Inspectors (the NSC can, in turn, look to them for further advice)
- The Land Transport Security Team at DfT (Sandra Iles is the lead policy official on
- National Railway security policy: landsecurity(@dft.gsi.gov.uk)
- British Transport Police Counter Terrorism Security Advisers, FHQCrimereduction@ btp.pnn.police.uk give advice in relation to the siting of bike stands in compliance
- with the NRSP and detailed guidance on the use of CCTV, secure compounds and appropriate lighting standards

We suggest that you make the NSC your first port of call, for security related information and guidance, and that you include DfT in any substantive discussions on railway security policy issues (e.g. design/operation in security terms of new cycle storage initiatives). DfT can advise on whether new operating protocols/

procedures or a trial of the initiative are needed, bearing in mind station operators' obligation to demonstrate compliance, and the need to avoid unintentionally importing additional potential security risks. Both DfT and the NSC will be happy to discuss and provide constructive feedback on your plans and proposals, from a railway security perspective.

USEFUL SOURCES OF INFORMATION

Better Stations Report assets.dft.gov.uk/publications/better-rail-stations/report.pdf

Guide to Station Planning and Design

www.networkrail.co.uk/workarea/downloadasset.aspx?id=30064777621

Bike and Rail 2004

webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/sustainable/cycling/dftbikeandrailpolicydocument

Investment in Cycle Facilities at Rail Stations

webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/sustainable/cycling/dftbikeandrailpolicydocument

Network Rail Corporate Responsibility Report 2011

www.networkrail.co.uk/uploadedFiles/networkrail.co.uk/Contents/ Publications/Corporate_responsibility_report/2010(1)/Common/ Network_Rail_Corporate_Responsibility_2010_2011.pdf

The Rail Industry Sustainable Development Principles www.rssb.co.uk/SiteCollectionDocuments/national_programmes/ sustainable_rail/Rail%20Industry%20Sustainable%20Development%20 Principles.pdf

Northern Rail Cycling Strategy 2010 www.northernrail.org/pdfs/Cycling_Strategy_2010.pdf

Cycling by Train 2011 (National Rail leaflet) www.nationalrail.co.uk/passenger services/2011CyclingbyTrain.pdf

Inclusive Mobility: A guide to best practice in access to pedestrian and transport infrastructure

http://assets.dft.gov.uk/publications/access-inclusive-mobility/inclusive-mobility.pdf

The Cycle-Rail Working Group is a cross industry working group that encourages implementation and best practise development of strategic policy in relation to the delivery of cycle-rail integration.

The Group is Chaired by Phillip Darnton, Bicycle Association and the secretariat role is fulfilled by ATOC.

Group members include:

Association of Train Operating Companies (ATOC) Network Rail Transport for London Department for Transport Accessible Train Station Design for Disabled People: A code of practice

assets.dft.gov.uk/publications/access-inclusive-mobility/inclusive-mobility.pdf

Crime and Disorder Act 1988

www.legislation.gov.uk/ukpga/1998/37/contents

Sustrans

www.sustrans.org.uk

CTC www.ctc.org.uk

UKCA www.cyclenation.org.uk

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Author Alex Sully, alex.sully@transport-initiatives.com Transport Initiatives

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NOTES







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