

A.06 Contra-flow Cycling

Key Principle

Two-way cycling should be the default option where it is proposed to introduce one-way working for general traffic.

Design Guidance

Background

Cycle Infrastructure Design:

7.6.2 Contraflow schemes can function satisfactorily in a variety of conditions, including very narrow streets, streets with high pedestrian flows and streets with high levels of kerbside parking or loading activity. Cycling in contraflow can be safer as well as more convenient than cycling along an alternative route, which is likely to involve longer distances and may be more hazardous.

The introduction of one-way working can cause significant problems for cyclists if they are forced to use more circuitous and hazardous alternative routes as a result. This can be a deterrent to cycle use.

Two-way cycling should, therefore, be the default option where it is proposed to introduce one-way working for general traffic. Any decision not to provide cyclists with this facility should only be taken after a thorough examination of the proposal has shown that such an arrangement could not be made to operate safely. Since many one-way streets were originally two-way working it is likely that most could be converted to rectify this omission.

Research by the Transport Research Laboratory (TRL), has found that properly designed contraflow schemes can function satisfactorily in a variety of conditions. Safety practitioners should note that this research found that in none of the cases studied had cyclists had been put in a position of serious conflict, and the behaviour of cyclists was not judged to have endangered pedestrians.

A well-designed scheme should not, therefore, give rise to undue safety problems. Any specific concerns identified during a safety audit should be balanced against the likely hazards faced by cyclists forced to use alternative routes if contraflow cycling is not allowed. The audit should also take into account the fact that if no contraflow facility is provided a certain proportion of cyclists will travel in the contraflow direction illegally and, therefore, at increased risk due to the lack of formal provision.

Contra flow cycling can exist in a number of forms;

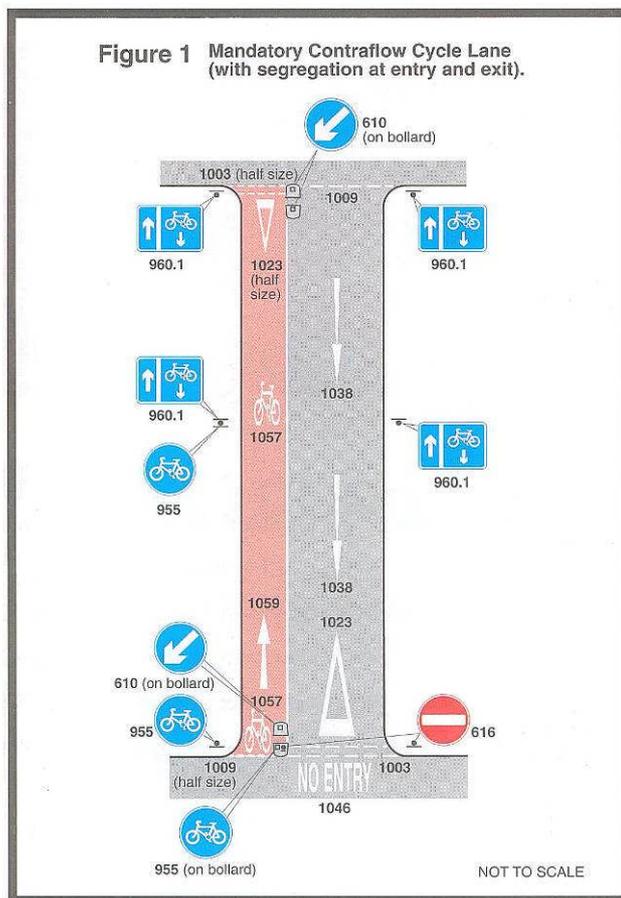
- The cyclist entry and/or exit points may or may not be segregated from oncoming traffic.
- The cyclist's route can be marked with a mandatory lane, an advisory one, or it may be unmarked.
- Cyclists can be allowed to use a contraflow bus lane.
- The street could be one-way for motor traffic, or it could be a false one-way street.

Segregation at entry points

Segregation at the entry and exit points is the preferred option. Cyclists are more likely to have an accident at these locations because motorists may not anticipate their turning manoeuvres which will differ from those of other traffic. Segregation here helps reduce the potential for conflict. In addition, cyclists are not allowed to ignore No-entry signs, and a segregated entry point allows them to by-pass the sign to gain legitimate entry to the street.

Erecting supplementary plates with the legend 'Except cyclists' underneath the no-entry signs is not currently permissible, although it is common practice in many other European countries. If it is not possible to provide segregation at the entry to a one-way street, motor vehicle entry can be prohibited by using the No-motor-vehicles sign (Diagram 619) instead.

Where segregation is provided passive measures such as build-outs should be installed to prevent cycle gaps and lanes being blocked by parked vehicles.



Pictures: Sustrans



Image from TAL 6/98 *Contraflow Cycling* DfT 1998

Mandatory Cycle Lanes

Mandatory lanes are often accompanied by waiting and loading restrictions to prevent cyclists from having to deviate from them. Where parking takes place on the nearside of cyclists in contraflow, it will be necessary to draft the traffic regulation order such that motor vehicles are allowed to cross the cycle lane in order to park (see also [A11 Cycle Lanes](#)).

The desirable minimum width of any contraflow lane is 2m. Where space is constrained it may be reduced to an absolute minimum of 1.5m. The width of the with-flow traffic lane may be as little as 2.5m where there are low volumes of heavy goods vehicles and the servicing needs of shops and other premises are met by off-street loading or other means. The preferred minimum width is 3m as this is less likely to cause with-flow traffic to encroach upon the cycle lane.



Segregated entry to physically segregated off-side contraflow lane - London. Note that this solution can be confusing to drivers and is not recommended where there are side turnings along its length (see 'Other considerations' below).

Picture © Alex Sully
Transport Initiatives

Advisory Contraflow Cycle Lanes

Where the 85th percentile speed is less than 25mph and traffic flows are below 1,000 vehicles day, advisory lanes may be considered. This approach may be a suitable option where on-coming vehicles need to encroach into the lane to pass obstructions, or need to cross it to park. Advisory lanes also allow for occasional loading and unloading taking place within the lane.

If an authority wishes to use advisory contraflow cycle lanes, it will be necessary to apply for authorisation for the non-prescribed sign to Diagram NP960.2.

Advice on the procedures is set out in [TAL 6/98 Contraflow Cycling](#) .

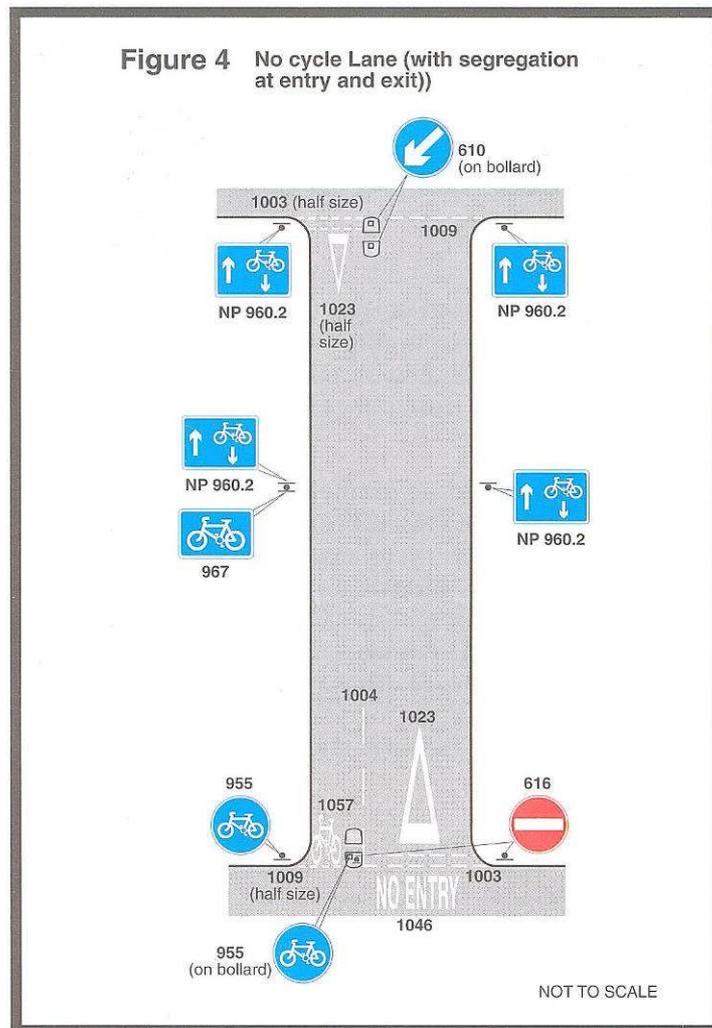


Image from TAL 6/98 *Contraflow Cycling* DfT 1998

Cycle use of contraflow bus lanes

Whenever practicable, cyclists should be permitted to use contraflow bus lanes. Vehicular access to the street can be restricted to buses and cycles by using the blue 'Route for buses and pedal cycles only' sign to Diagram 953 together with the 'Only' plate to Diagram 953.2 (the sign can be varied to include taxis).

Other considerations

Wherever possible, the arrangement should normally be that opposing traffic is usually on the left side of the carriageway as in normal two-way running. Some contraflow streets use segregation between cycles and motor vehicles to do otherwise, but this can be confusing to drivers, especially at night. It also increases the potential for conflict where there are side turnings along the length of the street.

Two-way cycling may not always be appropriate on roads with higher speeds and volumes. A cycle audit will help establish the best approach see [A15 Audits and Risk Assessment](#).

No Entry 'Except Cycles'

The use of 'Except cycles' signs (Diag. 954.4), and variations such as 'Except for buses and cycles', is not currently permitted within TSRDG although a small number of trial sites are currently in operation. It is, however, known that a number of authorities already employ them where there have been enforcement problems with 'false' one-way streets using signs to Diag. 619 (see above) or there is insufficient room to create a cycle gap and authorised no-entry signing. This practice is common in mainland Europe.

Unauthorised signing used to permit two way flows of buses and cyclists under narrow bridge

Picture © Alex Sully
Transport Initiatives



Unauthorised signing used to minimise clutter and additional works in narrow historic street

Picture © Alex Sully
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Dutch example using a pictogram to denote two-way cycle and moped flows (note: mopeds often share cycle facilities in the Netherlands)

Picture © Alex Sully
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French version: (entry)
forbidden except cyclists

Picture Tony Russell CTC



German pictogram at a
point where a side road
ends at a 'T' junction and
the main road comprises a
one way street to left and
right.

Picture © Alex Sully
Transport Initiatives

Entrance to a Woonerf in
the Netherlands: legend
beneath 'No-entry' sign
reads "Behalve
(brom)fietsen" – best
translated as "Except for
(mopeds) & bicycles"

Picture © Alex Sully
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Parking in one-way streets

If parallel vehicle parking is allowed on the near side of a marked contraflow cycle lane, drivers pulling out of these bays will usually be facing contraflow cyclists. However, the driver will be on the far side of the car and so will have limited visibility of approaching cyclists as he starts to pull out. Also, if a cyclist collides with a carelessly opened vehicle door, contact will generally be with a door panel not a door edge. It is unlikely to be acceptable to reduce or delete the buffer zone between these parking bays and the cycle lane if space is limited.

If echelon parking is allowed, it should not be positioned on the near side of cyclists travelling in contraflow. Drivers reversing out of these bays will naturally tend to check behind them but they may forget to look out for contraflow cyclists coming from the opposite direction.

Publications

[Cycle Friendly Infrastructure - Guidelines for Planning and Design](#) Bicycle Association et al 1996

[TAL 6/98 Contraflow Cycling](#) DfT 1998

[Traffic Signs Regulations and General Directions](#) DfT 2002

[Further developments in the design of contra-flow cycling schemes](#) TRL 358 1998

[Cycling England Gallery](#) pictorial examples

[London Cycling Design Standards – A guide to the design of a better cycling environment](#) (Sections 3.4, 3.5, and 3.6) TfL 2005

Lancashire - The Cyclists' County ([part 1](#), [part 2](#)) – creating pleasant road conditions Lancashire County Council, 2005 – Section 3

[CTC Benchmarking](#) – Best practice case studies

[National Cycle Network – Guidelines and Practical details, Issue 2](#) Sustrans 1997

Other references

[Cycle Friendly Infrastructure - Guidelines for Planning and Design](#) Bicycle Association et al 1996

TAL 1/87, *Measures to control traffic for the benefit of residents, pedestrians and cyclists*; DoT