



EuroVelo 1 – Atlantic Coast Route sign in Spain

# EuroVelo Transnational Signing Manual

Prepared in the frame of the AtlanticOnBike project extension

European Cyclists' Federation, 2023



[www.eurovelo.com](http://www.eurovelo.com)





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# 1. Introduction

## 1.1 Origins and objectives of this manual

The main objective of this manual is to present the most general principles for signing long-distance cycle routes in general, and the specific requirements for incorporating EuroVelo logos on route panels. General principles for signage are relevant in the development of any long-distance cycle route. This manual can thus serve as a general resource for cycle route signage across Europe.

This Transnational Signing Manual covers the entire EuroVelo network with a special focus on EuroVelo 1 as it was realised in the frame of [AtlanticOnBike project extension](#). Additionally, care has been taken to make this manual's contents consistent with the provisions of the "Handbook for EuroVelo Route Inspectors", which specifies the quality criteria of the [European Certification Standard \(ECS\)](#) methodology regarding route signage, and of the "EuroVelo Brand Guide" regarding the inclusion of EuroVelo logo on signs.

[EuroVelo 1 – Atlantic Coast Route](#) is highlighted throughout the manual through examples and good practices for signage along the route, together with examples from other countries and EuroVelo routes, bringing a diversity of possibilities to the forefront. Some mistakes to avoid are also displayed, as they allow to see what not to do.

This manual is an update of the "Signing of EuroVelo cycle routes" manual published in 2010 and updated in 2016 and of the manual "Signage of EuroVelo 1 Cycle Route", published in 2019 in the frame of the initial AtlanticOnBike project, co-financed by the European Regional Development Fund (ERDF) through the INTERREG Atlantic Area Programme under Priority 4: Enhancing biodiversity and the natural and cultural assets.

## 1.2 Signing EuroVelo routes

Signing of EuroVelo routes is an essential requirement of the European cycle routes infrastructure. It is indeed necessary for users to find their way but also for the route to exist in itself and be easily recognisable.

The United Nations Economic Commission for Europe (UNECE) in cooperation with ECF produced in 2009 a recommendation for the signing of EuroVelo routes. The recommendation is included in the [Consolidated resolution on road signs and signals \(R.E.2\)](#), which can be found on [www.unece.org](http://www.unece.org). This recommendation remains very relevant and forms the basis of this signage manual.

According to the ECS criteria, which represent the quality objective in terms of EuroVelo routes developments, EuroVelo routes should be signed in line with national standards and EuroVelo guidelines, and no signs should be missing at major crossings or turning points. There should also be regular confirmation and distance signs to cater for the needs of families and cyclists using special types of bicycles. The exact criteria can be found in the [Quality criteria for long-distance cycle routes](#) manual.

More on the EuroVelo brand and its application on signs is available in Chapter 2: "Incorporating EuroVelo on signage".



### 1.3 Signage as an integral part of cycle route development

Signage is an important component of qualitative cycling infrastructure. It is essential that the signing of cycle routes is consistent and clearly recognisable. In general, signage is an integral part of cycle route development. The effective promotion of cycling tourism in Europe requires routes to be signed in a manner that can be understood by international and national users.

Even if the number of cyclists navigating cycle routes using smartphone applications is growing, and the number of available route planner apps is increasing, physical signage remains essential, as studies have shown.

For instance, according to the [ADFC Bicycle Travel Analysis 2023](#), which gives figures from 2022 surveys (compared to 2021), 68% (75%) of cycle tourists use signposting for orientation during their trip. We can conclude from this that following actual signs is still a favourite way of most cycle tourists while on holiday, as it allows to relax and take the eyes off the screen to enjoy the scenery, and that the importance of signposting seems to remain mostly constant from year to year, despite an increase in internet and smartphone apps usage.

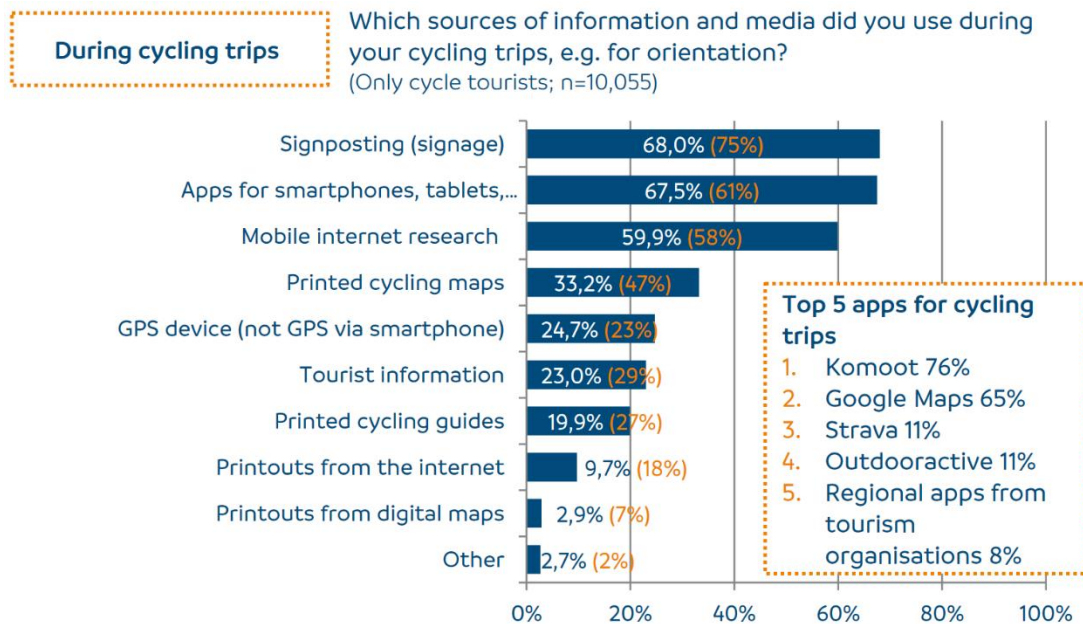
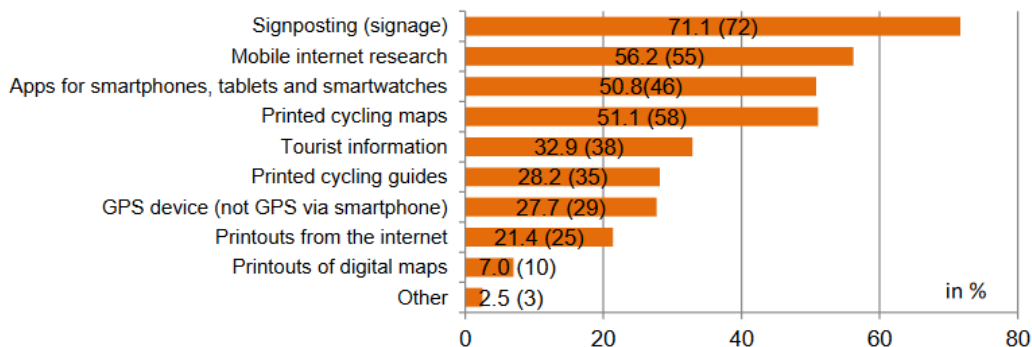


Figure 10: Which information sources and media do you use during cycling trips, e.g. for orientation? (Cycle tourists only; n=4,008) / Compared to 2018 (if asked)



Figures taken from 2023 ADFC Bicycle Travel Analysis, p.9



Physical signage also allows to better connect the route to the surrounding places of interest and services, and to promote local businesses. If a network of cycle-friendly services is in place in the country, they can be listed on information boards and the signage system can help strengthen the network.

Additionally, signage allows to create awareness on the existence of a certain route and brand, particularly to make it known to local cyclists and non-cycling tourists who could be interested in trying a cycling holiday. A clear and recognisable cycle route brand included on signs ensures that cyclists finding themselves on the route will be able to recognise the route as a mobility and tourism product that they can use. For this recognition to happen across several countries, it is important to apply the identity of the brand on signposts continuously and consistently in all countries crossed by the route.

## 2. Incorporating EuroVelo on signage

An easily recognisable EuroVelo route logo should be used or added to existing signage systems in order to identify a EuroVelo route. The EuroVelo route logos can also be used when communicating about a specific route. Please see the EuroVelo Brand Guide for more information.

The United Nations Economic Commission for Europe (UNECE) in cooperation with ECF produced in 2009 a recommendation for the signing of EuroVelo routes. The recommendation is included in the [Consolidated resolution on road signs and signals \(R.E.2\)](#), which can be found on [www.unece.org](http://www.unece.org). This recommendation remains very relevant and forms the basis of this signage manual.



*EuroVelo 1 route logo on urban signpost in Norway*

The EuroVelo route logo should be integrated into route signs in the same manner as other route information panels and according to national or regional standards. EuroVelo route logos should only be displayed on signs going along the specific route itinerary, and not on side or connection routes to services and attractions. The EuroVelo route logo can adapt to country-specific designs of cycling signage when being incorporated, as long as the guidelines outlined below are followed.

It is possible to combine EuroVelo information with other route information using the frame version of the EuroVelo route information panel. This version could be used as an interim solution on existing route signs where space for an additional panel is lacking. In most cases, the same version of the EuroVelo route information panel should be applied consistently over longer signed stretches.



Sign using the frame version of the EuroVelo route information panel  
on EuroVelo 19 – Meuse Cycle Route in France ©Pierre Defontaine - ARTGE

## 2.1 EuroVelo route logos on route signs

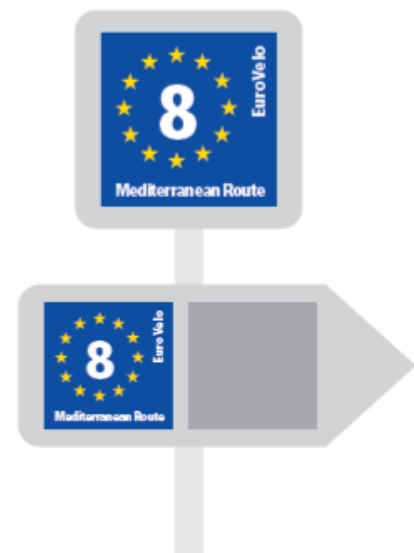
### 2.1.1 Design and guidelines

Each EuroVelo route has a unique number and name associated with it. The routes can be identified by their logos in digital and print communications. They are also used for road signage. When used on signs, EuroVelo route logos are called EuroVelo route information panels in order to better express their function.

In general, it is important to distinguish what is referred to by “(EuroVelo) route information panel” and “route sign”. Here are some definitions for clarifying this point:

- (EuroVelo) route information panel: a panel unambiguously identifying a (EuroVelo) cycle route with a (EuroVelo) route logo, for example by a number, a combination of letter and a number. (EuroVelo) route information panels or (EuroVelo) route logos can be placed on route signs, other signs, information boards, promotional materials etc.
- Route sign: a road sign including one or more (EuroVelo) route information panels and (optionally) additional information (for example direction arrow, name of the next main towns and distances).

In this chapter, we focus on EuroVelo signs. The EuroVelo route logos come in a standard version that is recommended by ECF. However, some variations are shown further in this section to fit other use cases and exceptions.



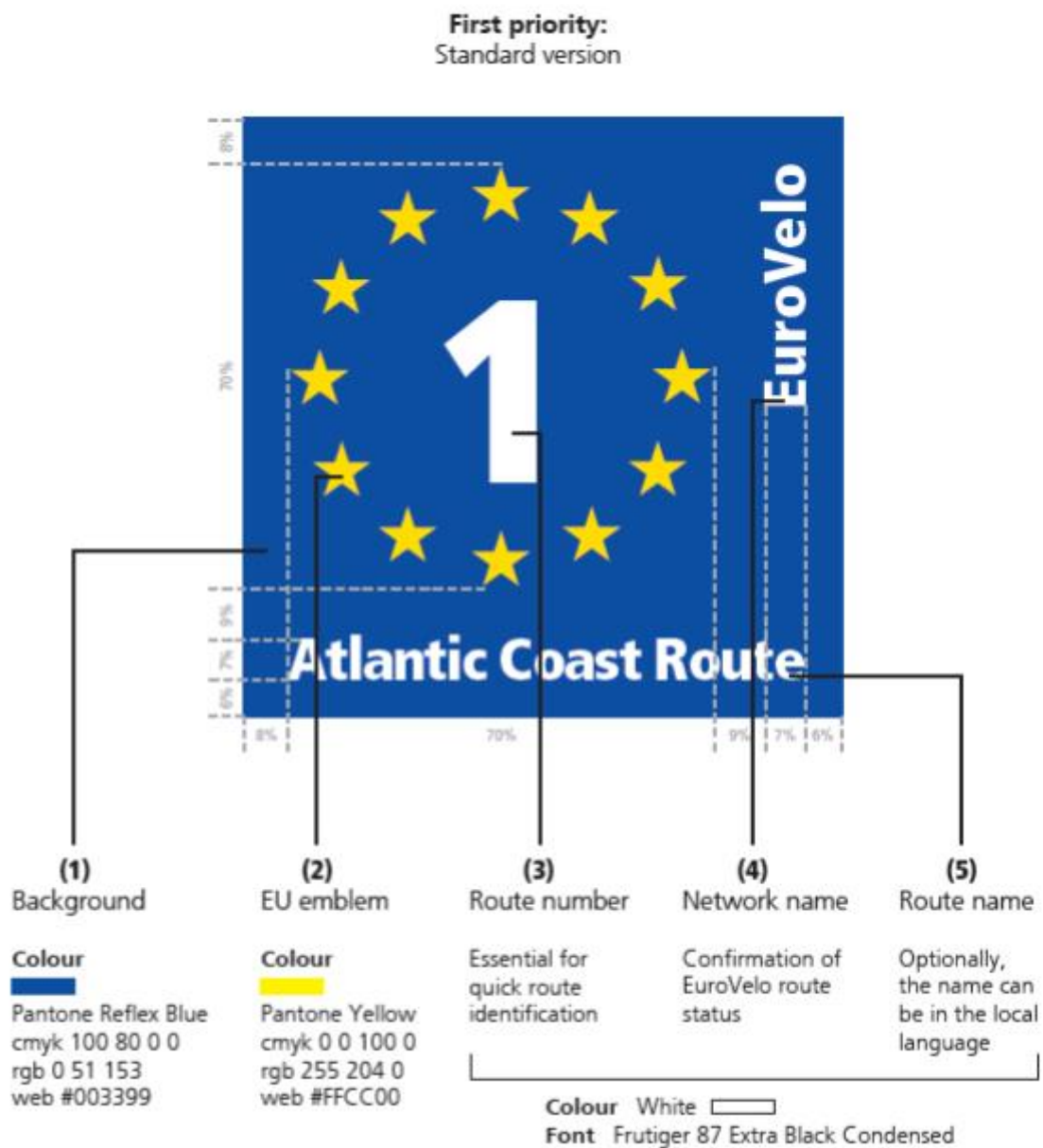
**Example**  
Standard version of the route logo  
on signs



Designs for new route signs that incorporate EuroVelo route information panels should be submitted to ECF and the corresponding National EuroVelo Coordination Centre (NECC) for approval before they are installed on the ground. Only the options for the EuroVelo route information panels included in this manual can be used. Please contact ECF and/or NECCs to request existing templates and master files and refer to the EuroVelo Brand Guide for further details.

EuroVelo route information panels include the following elements:

1. Background (colour, Council of Europe blue): displays a European aspect
2. Route number (colour, white): essential for quick route identification
3. Council of Europe stars (colour, yellow): displays a European aspect
4. EuroVelo route name (optional, name can be in the local language)
5. EuroVelo network name: EuroVelo or EuroVelo.com (optional, confirmation of EuroVelo route status)



*First priority when using a EuroVelo route information panel on signs: Full version with network name*





## 2.1.2 Variations and uses of the EuroVelo route logo on signs

Hereafter, the different versions of the EuroVelo route information panel can be found:



First Priority: Full version with network name



Second Priority: without network name or without route name (an alternative version is to include “EuroVelo” on the side without the name of the route at the bottom)



Third Priority: without route name or network name



Frame versions for combined usage. The three priorities for the EuroVelo route information panels are also applicable for the frame versions.

EuroVelo route information panels on signs should have sufficient size to be easily visible and recognisable by moving cyclists. In general, it is preferable to aim for characters of 60 mm where possible. See the *Practical aspects of Signage* section below for detailed guidelines.

## 2.1.3 Other uses of the EuroVelo route logo

EuroVelo route information panels can also be used on information boards placed along the route to provide detailed information such as a map of the local route sections, lists of accommodation, restaurants and bike services, location of rest areas and water supplies, etc. See the section 3.4 below “*Other components of the signing system*” for precise recommendations.

Additionally, EuroVelo route logos are used for communication purposes. In that case, guidelines included in the EuroVelo Brand Guide should be applied. ECF and associated partners should ensure correct use of the EuroVelo route logos across all media and relevant touchpoints as outlined in the EuroVelo Brand Guide.



## 2.2 Examples of national signage along EuroVelo 1 – Atlantic Coast Route

Set out below are some examples of signposting from each country along EuroVelo 1 – Atlantic Coast Route. As can be seen in the pictures, signage differs a lot from one country to another because national guidelines differ in terms of the signs' background colour, or the way EuroVelo route information panels are integrated on signs. As long as the EuroVelo route logo is clearly identified, users can follow it easily. It is primordial to keep a common identity along the entire EuroVelo route, and to make sure that signs are easy to spot for cyclists following them across several countries.

### Norway



First sign with EuroVelo 1 route information panel at the start of the route in North Cape, indicating the length of the entire route



EuroVelo 1 route information panel on urban signpost

### United Kingdom



Direction confirmation sign on urban signpost, including EuroVelo 1 route information panel alongside NCN sign and local route logo



Direction confirmation sign with EuroVelo route information panel and NCN 73 information panel, in the Dumfries and Galloway area of Scotland



**Ireland**



*Direction confirmation sign including next main town and distance*



*Simple newly installed EuroVelo 1 direction confirmation signs*

**France**



*Direction confirmation sign on wooden post*



*Direction confirmation sign including several route information panels*



*Integration on urban signpost*



*Integration on regional signpost, including next main towns and distances*



**Spain**



*Direction confirmation sign on wooden post*



*Redirection sign on urban signpost, with crossing safety indications*

**Portugal**



*EuroVelo route information panel on simple direction confirmation sign*



*EuroVelo route information panel on sign with next main town*

## 3. Signing long-distance cycle routes

This chapter provides a summary of the general principles and recommendations for the signage of any cycle route.

### 3.1 General principles for signage

#### 3.1.1 Signage guidelines

The following principles for signing long-distance cycle routes are valid anywhere and do not depend on a specific country:

- Signing should be in line with the relevant European (UNECE, European Certification Standard) or other global/transnational, as well as national standards and regulations;
- Long-distance cycle routes should be signed in both directions;
- Signing should be continuous and consistent throughout the itinerary;
- Signs should be easily legible by cyclists, located in the cyclists' field of view, have sufficient size and adequate contrast;
- Information on signs should be correct, sufficient and easy to understand;
- Adequate information should be provided at border crossing points and main junctions;
- Information should be provided in advance at complex junctions;
- Confirmation signs should be provided after junctions;
- Confirmation signs should be provided on long sections without junctions.

These principles will be further detailed in the below sections.

It should be noted that wayfinding signs do not carry any legal implications or change traffic rules on their own. If the route is to lead through infrastructure where currently cycling is not allowed by general rules or other traffic signs, general signage should be updated as well. Typical examples where this might be necessary include contraflow cycling or roads closed to general traffic (for example forest roads).

#### Example



*The cycle route sign with arrow pointing to the right indicates a direction that is forbidden for cyclists, as the upper sign obliges all vehicle drivers to turn left here. An exception for cyclists needs to be added under the upper sign.*

### 3.1.2 Conformity with national standards

Most European countries have national standards in place when it comes to signing and wayfinding. In some countries, specific guidelines are available for the signposting of cycle routes. The signposting of a cross-border long-distance cycle route should always be in line with the national standards and regulations of each country.

Here are some examples of national guidelines:

- **France** – Technical guide “Jalonnement des réseaux et itinéraires cyclables” by Vélo & Territoires: <https://www.velo-territoires.org/wp-content/uploads/2022/04/JALRIC-IDD.pdf>
- **Ireland** – Traffic Signs Manual by the Irish Department of Transport: <https://www.trafficsigns.ie/tsm-cur>
- **Spain** – EuroVelo 8 signing manual from the Region of Murcia: [https://www.turismoregiondemurcia.es/webs/murciaturistica/documentos/4/DOCUMENTOS\\_4\\_1157.pdf](https://www.turismoregiondemurcia.es/webs/murciaturistica/documentos/4/DOCUMENTOS_4_1157.pdf)
- **United Kingdom** – Department for Transport LTN 1/20 Cycle Infrastructure Design: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf) & Sustrans traffic-free routes and greenways design guide - 5. Signing and wayfinding: <https://www.sustrans.org.uk/for-professionals/infrastructure/sustrans-traffic-free-routes-and-greenways-design-guide/sustrans-traffic-free-routes-and-greenways-design-guide-contents/2019-design-guidance/part-1-general-principles/5-signing-and-wayfinding>

### 3.1.3 The specificity of cross-border signage

EuroVelo routes are per definition cross-border cycle routes, and care should be taken to ensure signing continuity across borders.

Here are a few elements that are recommended to put in place for a smooth cycling experience:

- Including the next main towns of the neighbouring country on signs and coordinating the content of signs (in order to avoid, for instance, one town being displayed on signs on one side of the border, then disappearing from signs on the other side, which is confusing for cyclists);
- Implementing signage in both countries' languages in a border area;
- Installing an information board at the border crossing point to indicate the signposting and other traffic rules in the next country.
- Where possible, harmonising wayfinding standards across neighbouring countries.

#### Good practices

- In Flanders (Belgium) and the Netherlands, long-distance cycle routes signage has been harmonised across the border, ensuring a continuous cycling experience along EuroVelo 12 – North Sea Cycle Route:



*EuroVelo 4 and 12 sign in Flanders*



*EuroVelo 12 sign in the Netherlands*

- In Wallonia (Belgium), the signage of the Centre Ardenne Véloroute indicates where it connects to EuroVelo routes, including across the French border. It provides the names of the main towns in France that can be reached by following the itinerary:



### 3.2 Methodology to prepare a signing plan

Proper signage of a long-distance cycle route requires a clear plan, considering the cities and places of interest crossed by the itinerary as well as its direct surroundings. The exact way to prepare a signing plan is likely to differ depending on the country's regulations. But in general terms, the methodology will contain the following steps:

- Identification of main cities, towns, transport hubs, places of interest and other relevant destinations along the itinerary, that should be indicated on signs;
- Identification of transport hubs and places of interest situated in the direct surrounding of the itinerary (e.g. max 5km), accessible by bicycle, to which information signs can lead;
- Classification of the destinations depending on their importance;
- Decision on the maximal distance from which an important destination will be indicated on signs:
  - In general, it is not relevant to include cities and towns situated more than a day of cycling away, i.e. more than 80 km.
  - However, taking into account the fact that these destinations need to be recognisable by international cycle tourists, there should be some flexibility on this maximal distance, for instance in the following cases:
    - Indication of an internationally famous city situated a bit further away along the route;
    - At chosen locations (e.g. main square of a city, border crossing, intersection of two EuroVelo routes), indication of the main destination in the neighbouring country, important locations or ending place of the EuroVelo route (e.g. North Cape, Lisbon). This can give cyclists a feeling of the international character of the route and inspire them to undertake a longer journey.
- Identification of main junctions, crossings, roundabouts and other turning points at which signs should be placed;



- Selection of destinations to mention on each sign to ensure good legibility (in general, it is not advised to have more than 2 mentions on a normal sign, or 4 to 5 mentions on special signs including long-distance locations);
- Double-check that the decisions made do not hinder route continuity (i.e. main cities and towns should be indicated with sufficient frequency).
- Coordination with the signage of other long-distance or local cycle routes if such exist or are planned in the near future:
  - If two or more routes are following the same itinerary along a specific section, their signs or route information panels should be placed together.
  - If they turn into the same direction, the arrows used should be identical, and so on.

**Examples**

TYPE DE PÔLE	NIVEAU N <sub>v</sub>	CRITÈRE DE NOTORIÉTÉ OU D'ATTRACTIVITÉ (Le pôle comprend une ou plusieurs de ces aménités ou services)	CRITÈRE DE POPULATION (Y compris population estivale)
Pôle principal correspondant aux « pôles verts » de la signalisation générale	3 <sub>v</sub>	<ul style="list-style-type: none"> <li>• Gare avec plus de dix trains /jour</li> <li>• Grand Site de France</li> <li>• Extrémité d'itinéraire régional ou national</li> <li>• Préfecture</li> </ul>	> 25 000 hab.
Pôle intermédiaire*	2 <sub>v</sub>	<ul style="list-style-type: none"> <li>• Gare avec plus de quatre trains/jour. Services vélo (location réparation)</li> <li>• Plusieurs possibilités de restauration ou ravitaillement</li> <li>• Présence d'un camping ou hôtel ou gîte d'étape</li> <li>• Plus de dix services labellisés Accueil Vélo</li> <li>• Site ou monument historique classé</li> <li>• Sous-préfecture</li> </ul>	> 2 500 hab.
Pôle de proximité	1 <sub>v</sub>	<ul style="list-style-type: none"> <li>• Présence d'un camping ou hôtel ou plus de cinq gîtes</li> <li>• Monument historique ou site inscrit</li> <li>• Ravitaillement minimal</li> </ul>	> 250 hab.

Criteria for destinations' classification (in French) from Vélo & Territoires' technical guide on signing cycling itineraries



Distant but important locations along EuroVelo 15 – Rhine Cycle Route included on signposts in Switzerland (e.g. Rheinfall, 118 km)



## 3.3 Practical aspects of signage

On top of the signing plans, practical aspects of signage need to be considered to ensure a smooth cycle ride for all users.

### 3.3.1 Sign location

The location of signs is very important for cyclists to get clear information in good time so as not to miss a turn or get lost.

There are various aspects related to the implementation of a sign:

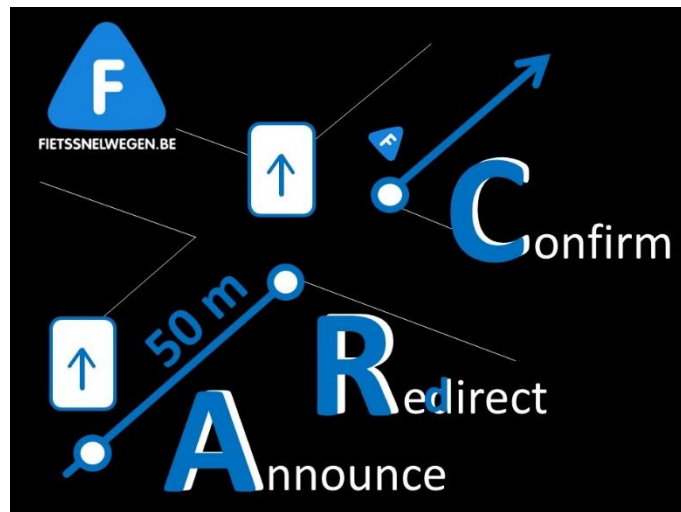
- Its positioning relatively to the crossing, junction, roundabout or other feature making it necessary;
- Its support structure and how it should be placed relatively to the edge of the carriageway and other features of the road cross-section;
- Its mounting height and lateral distance from the road.

#### Positioning

Cyclists must be able to read and understand a sign in sufficient time for them to react safely to its message. In order to achieve this, signs should be placed at the correct distances before the junction. It is also essential to ensure that signs are visible from a distance and are not obscured by objects, outgrown bushes or trees, or parked cars. Read more below in section “3.6. Audit and maintenance of signs”.

In general, there are three main locations where to position direction signs related to a crossing, roundabout or other type of junction. In the [CHIPS project](#), this is called the “ARC principle”: Announce, Redirect, Confirm<sup>1</sup>:

1. Announce before the decision point,
2. Redirect on the decision point, and
3. Confirm after the decision point that the cyclist is on the right track.



ARC principle from the CHIPS project

In practice, it is advised to place signs at the following locations:

- Announce: “Pre signposts” allow the cyclist to prepare for the turn and concentrate on safety when reaching the crossing. They should be well visible in advance. Crossings are often a place of interaction between users, so the cyclist needs to know the direction in advance to be able to signal

<sup>1</sup> Specific guidelines on signposting from the CHIPS project can be found on <https://cyclehighways.eu/design-and-build/infrastructure/signposting.html>.

their intentions and focus on observation of other users. Pre signposts can be placed 20 to 50 meters before the crossing/junction (not more than 20m according to the Signing Manual of EuroVelo in the Region of Murcia), or even 100 meters if it makes them more visible, for instance if there is already a lot of information close to the crossing. Pre signposts are necessary:

- On roundabouts and complex intersections (with more than 4 arms, or not at straight angle),
  - Before sequences of close intersection (e.g. turn to the left and after 50 m, to the right),
  - On downhill sections, where cyclists can reach higher speeds,
  - On public roads if the next sign or the turning point itself can be obscured by driving or parked cars,
  - If the turning point is not recognisable from distance (for example turning into a very small track or intersection behind a curve).
- **Redirect:** “Position signposts” are placed where the cyclist should turn. Some signing systems distinguish “turn after the sign” and “turn before the sign”.
  - **Confirm:** “Confirmation signposts” act as confirmation that the cyclist took the right way. These are useful also for improving the general route brand awareness, and to make the wayfinding system more robust, in case some signs have gone missing or became less readable because of vandalism or overgrown vegetation. They can be placed 50 to 100 m after the crossing point. Road markings can also be used as confirmation signposts.

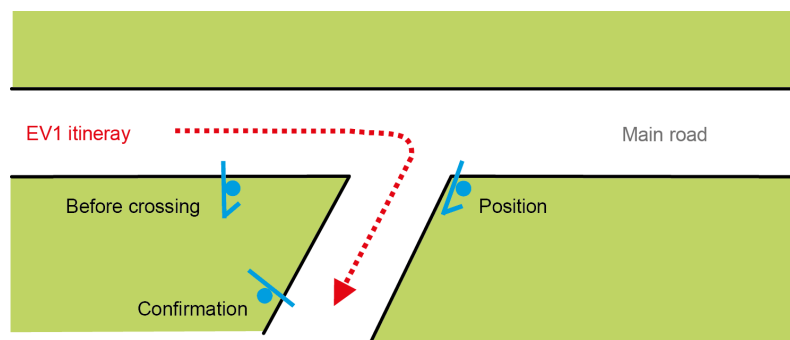
In the Signing Manual of EuroVelo in the Region of Murcia, however, it is advised to avoid pre signposts, to minimise the interference caused by too many signs, except on public roads with high traffic where it is advisable to inform cycle tourists in advance of the exit to be taken at a roundabout or complex junction.

In terms of angle, it is generally advised to place signposts perpendicularly to the direction of approaching cyclists, on the side of the road on which they are riding. This way, cyclists don't have to move their heads to see them, which reduces the reading time while driving and the risks of accidents, especially if the cyclist is riding fast<sup>2</sup>. But it is possible to tilt them to 10-15 degrees, taking into account that the sign is on the side of the track.

Whichever decisions are made in terms of signs positioning, consistency is fundamental. When the location and position of signs is standardised, cyclists learn where to look for them and get used to it, especially on long-distance cycle routes.

Mistakes to avoid:

- Signs pointing “in-between” the arms of an intersection, as this is very confusing for cyclists.
- Signs indicating “continue straight” if the straight direction is not obvious (for example on Y-shaped intersections).



*Illustration of the main location sites for direction signs*

<sup>2</sup> CHIPS project's recommendations on signposting

**Good practices**



Example of an “Announce” sign from EuroVelo 5 in Belgium, giving advance information on the way across a complicated crossing



Example of an “Announce” sign in France, indicating a roundabout 20m away and which exit corresponds to EuroVelo 3



Mock-up for an “Announce” sign on EuroVelo 8 in Murcia, Spain



“Confirmation” sign on EuroVelo 4 and 12 in France ©AD

**Support structures**

There are various possible support structures for placing signs:

- On single posts (standalone signposts), consisting of metallic poles, wooden bollards, etc.,
- On existing poles including other signs, which may reduce the risks of the sign being vandalised or rotated, but care must be taken not to add too many different signs on a single pole and to harmonise the various signs’ directions,
- Integrating route information panels in general wayfinding signs (for all users),
- Alternatively, attach signs to existing structures such as walls, fences, buildings, lampposts and other street furniture.

The possibility to place signs on other types of panels generally depends on the country’s regulations.

If the cycle route being signed is different from the one intended for car drivers (e.g. if the direction signs to the next town addressing general traffic lead to a motorway), it is good to place the cycle route sign on the same structure as the general wayfinding signs, in order to avoid any confusion and cyclists taking the cars’ way.

Additionally, as highlighted in the Signing Manual of EuroVelo in the Region of Murcia, it is preferable to make maximum use of existing signs to avoid an overabundance of signs, which requires additional attention from all users.

### Examples



*EuroVelo 1 signpost using an existing pole in France*



*Standalone EuroVelo 1 signpost (in this example, the yellow colour indicates a temporary route signage)*



*EuroVelo 1 sign attached to a wall in Spain*



*Various types of information integrated on a pole in Switzerland, including a EuroVelo 15 signpost*

### Mounting height and lateral distance

Recommendations on height and lateral distance differ between rural and urban areas and depending on the route's curve.

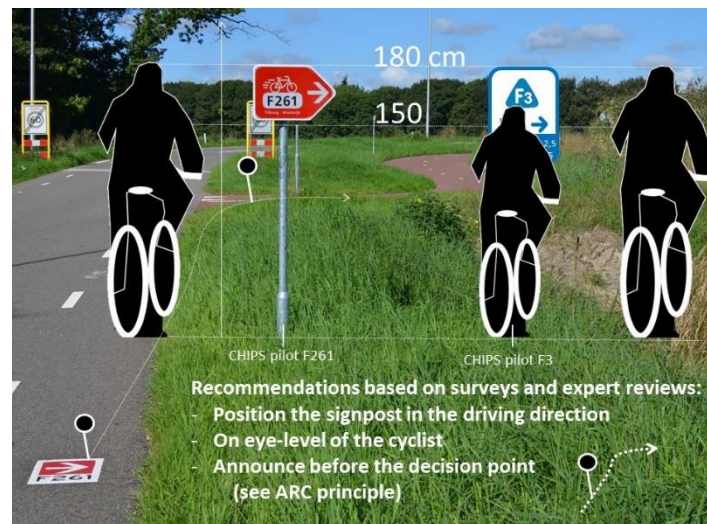
In general, national regulations on clearance above sidewalks and cycle tracks should be followed. But for countries in which these regulations are missing, and to give a common framework, hereafter are a few recommendations that have been summarised from several sources (see also the References' section below):

- CHIPS project's recommendations on signposting
- Signing Manual of EuroVelo Route in the Region of Murcia, Spain
- UK's Department for Transport LTN 1/20 Cycle Infrastructure Design, Chapter "Traffic signs, road markings and wayfinding"
- Vélo & Territoires' technical guide on signing cycle networks and itineraries

The most efficient mounting height for signs is to place them within eye-height of the cyclists, i.e. between 1,500 and 1,800 mm. Most cyclists often keep their eyes on the road surface in front of them, so signs that

are placed too high might be easy to miss. On the other hand, signs placed too low are under risk of being hidden by tall grass in summer or a snow heap in winter<sup>3</sup>.

According to Vélo & Territoires, signs in rural areas should be mounted clear of any vegetation with the lower edge of the sign at least 1000 mm above ground level. The recommended height is 1,700 mm in the Region of Murcia. According to UK's Department for Transport and the Region of Murcia's guidelines, signs on bollards are typically mounted at least 750/800 mm high to ensure they can be easily seen, and signs on walls placed at a height of 1,500 mm.



*CHIPS' project's recommendations on signs' mounting height*

On the other hand, placing signs within eye-height of the cyclists is not always possible or allowed in urban areas or other locations where pedestrians are likely to walk under the sign. In these cases, the desirable mounting height goes from 2,200 mm according to the Region of Murcia's guidelines, to 2,400/2,500 mm in locations where cyclists are also likely to pass under the sign, according to Vélo & Territoires and UK's Department for Transport.

Low-level direction signs at roundabouts and junctions may be mounted at lower heights, but not less than 750mm above ground levels according to Vélo & Territoires.

In terms of lateral distances, to avoid the risk of colliding with the panels, the minimum lateral distance from the edge of the cycle lane is 700 mm according to Vélo & Territoires, counted in relation to:

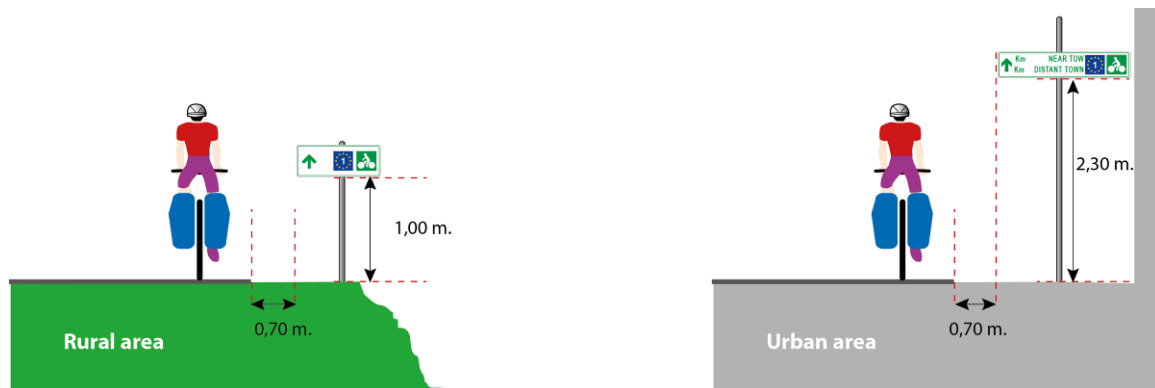
- the edge of the sign if the mounting height is less than 2,300 mm;
- the mast if the sign's mounting height is 2,300 mm or above.

On a bend, particularly downhill when the speed is high, this distance should be increased by 600 mm, thus reaching a total lateral distance of 1,300 mm.

According to UK's Department for Transport, signs should be placed at least 500 mm from the carriageway and cycle track edge, but no more than 1000 mm from the route to ensure that they are visible to users. Where bollards are placed in cycle tracks a clear width of 1,500 mm is required for access by the full range of bicycles.

Additionally, care must be taken to ensure that the signs do not obstruct sight lines, and are not obstructed by other signs, advertisements, fences, safety barriers etc.

<sup>3</sup> CHIPS project's recommendations on signposting



Vélo & Territoires' recommendations on signs' mounting heights

### 3.3.2 Sign frequency

In general, cyclists appreciate to see regular confirmation signs, even on straight roads. These signs can also serve to provide information on the distance of the next main town or transport hub.

At European level, the ECS criteria require that:

- No signing is missing at main junctions to cater for the needs of occasional cyclists, and
- Confirmation signs or horizontal markings are available after every junction and on long sections without junctions (at least every 5 km), to cater for the needs of more demanding cyclists.
- The signs should also include the name of and distance to the next main town or destination at least every 15 km, to cater for the needs of more demanding cyclists.

However, recommendations on the frequency of signs can vary from country to country. In the *Handbook for EuroVelo Route Inspectors*, it is noted that “a lack of any signs on a minor section can be interpreted differently depending on what is required or recommended in the national standards. Some national standards require signing only on turns and major crossings, some on every crossing and some require additional confirmation signs at set intervals if there are no crossings. In case the national standard does not require a confirmation sign every kilometre, the signing can still be considered as fully complying with the national standard if there are no signs but also if there is no need for signs (straight road or a cycle path with no possibility to turn, clearly signed on the last crossing before).”

Vélo & Territoire's technical guide on signing cycle networks and itineraries advises to place a confirmation sign on every kilometre to avoid uncertainty feelings for the cyclist. On the other hand, UK's Department for Transport LTN 1/20 Cycle Infrastructure Design insists on the fact that there is a balance to be struck between providing enough signs for people to be able to understand and follow cycle infrastructure and ensuring that the signs themselves do not create confusion or street clutter. In the Region of Murcia, it is advised to place confirmation signs on long route stretches with no more than 2.5 km separation between them.

### 3.3.3 Sign content and design

In this section, we are discussing the content and design of route signs, which include (EuroVelo) route information panels.

#### Elements of the sign

Signs should indicate the direction of an itinerary by including the EuroVelo route information panel and having a chevron or arrow at one end, except if the direction is very clear (e.g. in case of a confirmation sign after a crossing or on a long straight road).

It is important to note that if a specific route logo is used, in addition to the EuroVelo route logo, or on a non-EuroVelo long-distance cycle route, the route logo should not be too complicated and should follow the contrasts' principle (see the note on “colours and contrasts” below).

The sign may also indicate destinations and distances. It is generally best to make choices between the destinations along the route and to limit the number of mentions to 2, in order to ensure a good legibility. The destinations listed should not change between the subsequent signs until you reach one of the destinations. If one of the destinations suddenly disappears from the signs, the user might think that they missed a turn.

In general, two types of signs can be listed in terms of content:

- Complete sign, including (EuroVelo) route information panel, destinations and distances;
- Simple sign, including only the (EuroVelo) route information panel or route logo, and, depending on national regulations, the bicycle pictogram.



If different signs are placed in one location, they should provide similar level (preferably complete) of information. Mixing different types of signs on one support structure can be confusing for travellers.

If multiple signs are placed on the same support structure, or multiple directions indicated on one sign, the (EuroVelo) route information panel(s) should be integrated in a way that does not leave any doubts whether they apply to all or only selected directions.

**Example**



Complete sign on EuroVelo 15 in Germany ©AD-TB



Simple sign on EuroVelo 17 in France ©AD-TB



Multiple signs included on the same pole, pointing in various directions. It is unclear if the EuroVelo route information panel applies only to the top sign, or to several signs.



### Shape

Generally rectangular, but the sign can also have an arrowhead to indicate the direction (as is generally the case in the UK, Ireland, Switzerland, Hungary, Poland...). Arrowhead signs are easily recognisable and more difficult to vandalise (for example with stickers) than rectangular signs with a painted arrow.

### Example



*EuroVelo 15 arrowhead signs in Austria (following the Swiss design)*

### Size of characters and logos

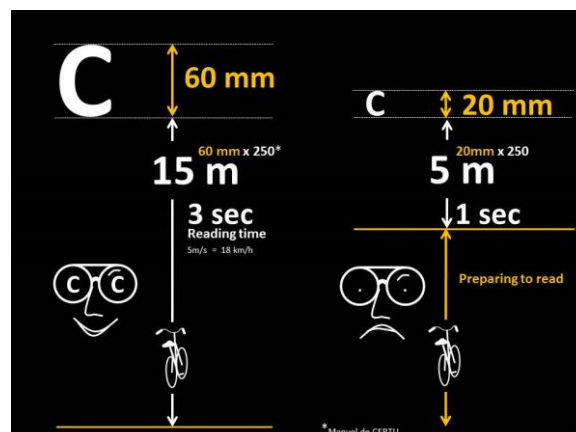
Both the characters and the (EuroVelo) route information panel should be big enough to ensure legibility by moving cyclists from a distance.

In the frame of the CHIPS project, it was calculated that indications are readable if the reading distance is less than 250 times the size of the letters. This means that for a cyclist moving at 18 km/h to have 3 seconds to read the contents of a sign, letters should have a font size of at least 60 mm.

Vélo & Territoires' technical guide on signing cycle networks and itineraries recommends the following minimal heights:

- Characters: 30 to 50mm on rural areas' signposts;
- Characters: 50 to 62.5mm on urban areas' signposts, to ensure good legibility;
- Route information panel: 1.5 times the characters' height for a one-line signpost;
- Route information panel: 2.5 times the characters' height for a two-lines signpost;
- Route information panel on a simple sign without text: 125 x 125 mm.

This is in line with the Region of Murcia's guidelines, which recommend dimensions of 120 x 120 mm for the route information panel on simple signs, and 80 x 80 mm on complete signs, with characters' height from 35 to 45 mm. In general, it is preferable to aim for characters of 60 mm where possible.



*Reading time depending on characters' size, from Manuel de CERTU*



### **Colours and contrasts**

Using high contrasting colours on signs is important to increase their visibility, especially in bad weather conditions, and also to make them easier to read by visually impaired cyclists. A white border makes the sign easier to distinguish from the background for colour-blind people<sup>4</sup>.

Examples of contrasting colours which are easily distinguishable from each other are available online, see for instance <https://coolers.co/contrast-checker>. It is recommended to choose text and background colours with a contrast ratio superior to 8 for good visibility.

Technical limitations of paints used should also be taken into account. For instance, orange wears much faster than some other colours.

### **Pictograms**

The use of pictograms is encouraged on signpost to services and places of interest (for example: train station, accommodation, food services, beach, toilet...), since these are more likely to be understandable for cyclists not speaking the local language.

### **3.3.4 Sign Materials**

The Signing Manual of EuroVelo in the Region of Murcia recommends using metal plates to ensure greater durability of the signs. The content of the signs can be printed on vinyl, protected by an anti-graffiti adhesive film. In rural areas, it may be better to place signs on wooden posts, for better integration into the landscape – except when they are next to the road, where official regulations should be followed (signposts generally have to be made of metal).

Care should be taken to ensure that good quality materials are used for route signs (euro-standard certification) and that ongoing maintenance is considered.

Additionally, ECS criteria require that the signing makes it possible to follow the route by night with standard bicycle lighting (e.g. signs are retroreflective).



*EuroVelo 4 sign in France in Somme Bay, protected natural area, using a pictogram of a bird ©AD-TB*

<sup>4</sup> CHIPS project's recommendations on signposting



### 3.3.5 Common sign defects

Common sign defects include:

- Missing – lack of sign on a main junction or crossing where it would be necessary, resulting in a lack of continuity in the signposting. This defect can be both a deficiency of original signage or a result of vandalism. This defect is common inside cities, where the high number of junctions increase the need for additional signs.
- Wrong place/content – misleading location of the sign or misleading information on the sign. This can happen for instance in case of:
  - Sign placed only after a crossing;
  - Rotated sign;
  - Destinations not recognisable for long-distance cycle tourists, who are not sure of which one to follow;
  - (EuroVelo) route information panels placed on several signs pointing in various directions, which is confusing for cyclists who don't understand which way to go;
  - Ambiguous sign, likely to lead to mistakes if cyclists are passing by quickly.
- Badly/not readable – sign too small to read, hidden, damaged or worn-out, e.g.:
  - Sign placed too far away from the turning point considering the font size;
  - (EuroVelo) route information panel printed too small for a moving cyclist to be able to read its content;
  - Sign overgrown by greenery.
- Not well-maintained signs leading to missing or not readable signs (read more in section “3.6. *Audit and maintenance of signs*”)

The best way to avoid making signing mistakes is to standardise the signage in terms of the following elements:

- Size, fonts, colors, shape
- Logic
- Location: height, distance, angle
- Content
- Integration with local/regional routes

## Examples



*Signing mistake – EuroVelo 1 panel applied both on the EuroVelo 1 route (arrow to the left, direction Les Sables d'Olonne), and a different route (arrow to the right, direction Niort).*



*Signing mistake – EuroVelo 1 leads to Bayonne, but here it is showing the opposite direction. Mixing complete and simple signs often leads to confusion. Users cannot know if they need to follow the direction indicated by the upper sign (as the lower sign might point to the direction opposite to Bayonne), or the direction indicated by the lower sign (as the upper sign might point to an itinerary other than EuroVelo).*



*Confusing sign placement – indicates turn to the left, but there are two roads to the left. Which one to take? This can be resolved with a confirmation sign or an advance notice sign with a diagram of the crossing.*



*Very bad legibility because the small size of the EuroVelo Route Information panels*

### 3.4 Other components of the signing system

In addition to formal direction signs, there are other components that are useful in signing systems. These include:

- Information boards / panels to give background information on the route, list services and places of interest, and add interest to the trip;
- Road markings;
- Informative signage to places of interest, such as services and attractions.

#### 3.4.1 Information boards

Map-based information boards may be placed at key access points, particularly when entering traffic-free networks, to help people appreciate what opportunities they have and to familiarise themselves with the locality. The boards should be positioned to face the direction of travel. Where cyclists share a route with other users, informational boards can be combined to eliminate duplication and clutter.



The informational boards should be able to provide at least the following information:

- Map of the route
- Location of sites important for cycle tourists (e.g. public transport interchanges, main attractions, accommodation and bike repair shops etc.)

Information boards should also include the relevant EuroVelo route information panel and complementary information on EuroVelo when relevant.

In the Region of Murcia in Spain, information boards are placed in each passing locality, in a central space where cyclists have the opportunity to stop. They include information on the town and the previous and subsequent sections of the route to the next localities.

**Good practices**



Information board about EuroVelo 1 – Atlantic Coast Route in County Clare, Ireland, including a map of the route inside the county, information in several languages, signposting information and elevation profile.



Information board along EuroVelo 1 – Atlantic Coast Route in Ireland including a map with places of interest, information on the greenway and next destinations.



Information board on EuroVelo 1 – Atlantic Coast Route in France, including maps of the full route and of the route in the region, information on places of interest, cyclists-friendly accommodation, etc.



Information board on EuroVelo 1 – Atlantic Coast Route in Spain including information on the whole route and its regional part, elevation information, pictograms, etc.



Information board along EuroVelo 1 – Atlantic Coast Route in Portugal, including information about the town and the EuroVelo network as a whole



Information board on EuroVelo 6 when entering Serbia from Croatia ©AD-TB



Information board on EuroVelo 8 in Italy ©Spiros Papageorgiou

For immediate access to up-to-date information, cyclists using their smartphones could be afforded the opportunity to scan a QR code located on information boards / panels. Ideally the code would bring the cyclist directly to a website which contains detailed information about the route (e.g. maps, accommodation, public transport connections etc.)

### Example



Mock-up for EuroVelo 8 information boards in Murcia, Spain, including a QR code redirection to the route website for more information

### 3.4.2 Road markings

Putting markings directly onto the road can be used in the same way as confirmation signs to reassure cyclists that they are on the right track. They can incorporate the relevant route information panel. Importantly, road markings should be placed in addition to – and not as replacement of – upright signs. But if they are well maintained, they can be a part of the wayfinding "logic" – for example upright signs for announcing the route or highlighting a turn, and road markings for confirmation.



## Examples



*Example of road marking on EuroVelo 1 in Portugal, using the EuroVelo route information panel and a cyclist icon. In this example, the marking should be sharper.*



*EuroVelo 4 road marking in France. In this example, the EuroVelo route information panel should have been used rather than the abbreviation "EV4", which is not to be used for communicating about EuroVelo routes.*

### 3.4.3 Informative signs to places of interest

Signs can be installed that refer to destinations that are close to the EuroVelo route but not necessarily on it. Such destinations can include public transport interchanges, major points of interest and other cycle routes. It should be made clear that these are not located on the EuroVelo route (i.e. by not including the EuroVelo route information panel on the sign).

#### Example



*A sign for nearby tourism office and touristic places on EuroVelo 1 – Atlantic Coast Route in France*

### 3.4.4 Warning and caution signs

On routes including critical issues at the time of signposting (e.g. sections with high traffic, dangerous crossings, poor road surface, steep slopes...), warning and caution signs can be placed to inform cyclists on what they need to pay attention to, and to inform car drivers that the road they are on is part of a long-distance cycle route. This has been implemented in the Region of Murcia, Spain, to improve the safety of all users.

The Signing Manual of EuroVelo in the Region of Murcia advises to place warning signs, if similar signage is not already in place:

- On the cycle route: 10 to 20 meters before a crossing with a public road with high traffic;

- On the car road: 100 meters before crossing the cycle route, to warn car drivers of the upcoming crossing.

In general, national guidelines regarding warning signs on public roads, and the types of signs to use, should be followed in priority.

**Examples**



Mock-ups for warning signs for cyclists in the Region of Murcia



Mock-ups for warning signs for cars regarding the cycle route, in the Region of Murcia

### 3.5 Special cases

#### 3.5.1 Continuity signage

In countries where a national cycle network has already been developed and signed, and if budget is lacking to implement a full EuroVelo signposting in addition to the existing signs, continuity signage can be used. The principle is to inform users to which national route the EuroVelo itinerary corresponds in the area, and which signs they need to follow.

Explanatory panels need to be placed at each crossing and ambiguous location, in both directions, and to be repeated regularly for new users joining the itinerary. Panels should include an image of the sign that users will need to follow and indicate on what distance this is valid.

Let us note that for the sake of clarity, it is always better to implement a full EuroVelo signposting and integrate EuroVelo route information panels on relevant signs. This alternative solution is meant as a way to ensure continuity of EuroVelo signposting in countries or regions where the full signposting has no chance to happen in the short term.

**Example**



Continuity signage installed along EuroVelo 1 – Atlantic Coast Route in the UK so that there is always at least one EuroVelo route logo on every daily section

#### 3.5.2 Signing detours

In case of works on the itinerary that prevent cyclists from using the normal route for an extended period of time, a suitable detour should be signed, following the same rules and guidelines. The signs can be implemented in a different colour, usually yellow or orange, to indicate that this is a temporary itinerary. There should be an explanatory panel at the start of the detour.

The detour signs should also include the (EuroVelo) route information panel. Signs with just “detour” or bicycle pictogram are not enough, especially considering there can be multiple roadworks and detours in the same area.

### Examples



*Unclear detour signs: only the bicycle pictogram, pointing in all directions*



*Good example of detour signs, clearly showing the EuroVelo 1 route information panel in France*

### 3.5.3 Signing itinerary variants

In some instances, a long-distance cycle route can split over a certain distance to allow the user to choose which route to follow according to the length, topography, nature of the route (shared with cars or separate cycle path, surfaced or not), or the tourist interest. When this is the case, it is important to point out these differences at the splitting point.

In the case of EuroVelo routes, these itinerary variants are generally avoided, but they can be met in some specific cases:

- When a route goes on both sides of a river;
- When a route includes crossing a river with a ferry, but another, longer variant is possible in case cyclists are out of the ferry’s operating hours;
- When along a short section there is no route catering to the needs of various types of cyclists, and different routes are recommended to different target groups; or
- If the volume of cycle traffic justifies providing alternative routes for different groups of users.

Please note that a new EuroVelo manual, the *Guidance on EuroVelo route development process*, is under preparation as of 2023 and will become the reference for itinerary variants allowed on a EuroVelo itinerary.

### Good practice



*Signing of alternative itineraries (ferry route or mainland route) on EuroVelo 4 and EuroVelo 12 in Zeeland, Netherlands, including a detailed explanation of the alternative*



### 3.6 Audit and maintenance of signs

After signs have been placed along an itinerary, the route should be surveyed to assess the quality of the signage from a user's point of view. This field assessment is the best way to check that signs have been well placed, that they are well legible, and that the signage is continuous. The survey data should be stored in a GIS database in order to prepare for and help future maintenance.

Ideally, maintenance of the signs should be planned together with the maintenance of the route, as an integral part of the infrastructure.

Signs get easily damaged, either as a result of weather conditions or of vandalism and degradation. Signposting materials also get damaged over time. Regular audits are necessary to identify and solve the issues. At European level, the ECS certification requires an audit every 5 years, but it is preferable to conduct surveys more regularly. More information about the ECS methodology for cycle route assessment is available in the *Handbook for EuroVelo Route Inspectors*.

It is also advised to coordinate with the traffic authority responsible for regular traffic signs – so if there are road works, closures or changes in traffic, wayfinding signs for cyclists get updated together with other signs.

#### **Good practice**

- In Extremadura (Spain), the route authorities included the maintenance of EuroVelo 1 signs within the Vías Verdes maintenance contract. This ensures that the signs will be regularly checked.



## 4 References

This publication is not a legal document and has been prepared for information and reference purposes only. It contains extracts of information from a number of documents listed below.

- CHIPS Project, co-funded by the Interreg North-West Europe Project – Guidelines on the signposting of Cycle Highways: <https://cyclehighways.eu/design-and-build/infrastructure/signposting.html>
- EuroVelo Brand Guide: available on demand to the EuroVelo Management Team
- EuroVelo – Handbook for EuroVelo Route Inspectors: short version on [https://eurovelo.com/download/document/ECS-Manual-2021\\_online.pdf](https://eurovelo.com/download/document/ECS-Manual-2021_online.pdf), long version available on demand to the EuroVelo Management Team
- EuroVelo – Signing of EuroVelo routes, ECF, 2016
- France – Technical guide “Jalonnement des réseaux et itinéraires cyclables” by Vélo & Territoires: <https://www.velo-territoires.org/wp-content/uploads/2022/04/JALRIC-IDD.pdf>
- Germany – ADFC Bicycle Travel Analysis 2023: <https://www.adfc.de/artikel/adfc-radreiseanalyse-2023>
- Ireland – Traffic Signs Manual by the Irish Department of Transport: <https://www.trafficsigns.ie/tsm-cur>
- Spain – Signing Manual of EuroVelo 8 – Mediterranean Route in the Region of Murcia: [https://www.turismoregiondemurcia.es/webs/murciaturistica/documentos/4/DOCUMENTOS\\_4\\_11\\_57.pdf](https://www.turismoregiondemurcia.es/webs/murciaturistica/documentos/4/DOCUMENTOS_4_11_57.pdf)
- UNECE – Consolidated Resolution on Road Signs and Signals RE2: [https://www.unece.org/fileadmin/DAM/trans/roadsafe/publications/docs/Consolidated\\_Resolution\\_on\\_Road\\_Traffic\\_RE2\\_e.pdf](https://www.unece.org/fileadmin/DAM/trans/roadsafe/publications/docs/Consolidated_Resolution_on_Road_Traffic_RE2_e.pdf)
- United Kingdom – Department for Transport LTN 1/20 Cycle Infrastructure Design: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951074/cycle-infrastructure-design-ltn-1-20.pdf)
- United Kingdom – Sustrans traffic-free routes and greenways design guide - 5. Signing and wayfinding: <https://www.sustrans.org.uk/for-professionals/infrastructure/sustrans-traffic-free-routes-and-greenways-design-guide/sustrans-traffic-free-routes-and-greenways-design-guide-contents/2019-design-guidance/part-1-general-principles/5-signing-and-wayfinding>



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eurovelo@ecf.com

+32 2 329 03 84

**Authors:**

Aleksander Buczynski, Florence Grégoire

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*EuroVelo 1 is a cycle route of around 11,000 km, the longest route in the EuroVelo network, following the majestic Atlantic Coast from Norway to Portugal, across 6 different countries. More information on this route can be found at [www.EuroVelo1.com](http://www.EuroVelo1.com).*

European Cyclists' Federation asbl

Mundo Madou  
Rue de la Charité 22  
1210 Brussels, Belgium  
eurovelo@ecf.com

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