

1. EuroVelo background and route map

EuroVelo is the project, initiated by the European Cyclists Federation (ECF) in 1995, to develop 12 long-distance international cycle routes spanning all of Europe – both within and beyond the EU. It is being developed by organisations representing most countries in Europe, coordinated through many years by the ECF, De Frie Fugle (DK) and Sustrans (UK). Now ECF from the office in Brussels coordinate the project with advices from the EuroVelo Council.

EuroVelo is already happening. The proposed routes, totalling more than 66,000 km, are based largely on the cycle routes already existing or planned, at local, regional and national level, in the countries through which they pass. EuroVelo is not simply about creating routes - it is about linking them into a pan-European whole. This continental perspective has allowed the EuroVelo vision to support a number of route creation projects since its launch.

The future for cycling has never been brighter. European and national policies, on global climate change, local air quality, road safety, tourism development among others, all suggest the possibility of promoting cycling. To do this, champions of cycling need to act to change the public agenda.

EuroVelo is certainly delivering the vision by coordinating the creation of a network of 66,000 km of cycle routes through the whole of Europe. And more than that: a great part of the visions have already been implemented. Especially in countries in eastern part of Europe like Poland, Baltic States, Czech Republic, Slovakia and the southern countries like Spain, Italy, Cyprus and Malta many initiatives to built cycle routes have been taken thanks to the EuroVelo project.

EuroVelo has created a very strong brand image despite the limited resources available. This has supported the creation of many sections of route in individual local projects.

EuroVelo has also helped to harmonise standards across Europe, both by the production and distribution of the *EuroVelo Guidelines for Implementation* and by direct assistance, such as to Estonia and Slovenia in planning national cycle signage systems (based on the system used in Denmark and the UK). EuroVelo News produced by Sustrans, circulated direct to 1,300 European, national and regional politicians and officials, and more copies distributed by the national representatives.

More information about EuroVelo available at www.EuroVelo.org



2. EuroVelo Standards

There are 5 guiding principles which should be satisfied by all facilities for cyclists (route criteria):

SAFETY

A route, which reduces the dangers for cyclists etc. to a minimum and makes people feel safe.

COHERENCE

A continuous route with identifiable EuroVelo characteristics, joining up with local roads and paths.

DIRECTNESS

A route that avoids unnecessary detours except to visit special beauty spots or sites of interest.

ATTRACTIVENESS

A route that complements and enhances its environment in such a way that makes cycling attractive.

COMFORT

A route that allows cycle traffic to flow comfortably and is easy to use.

Criteria for the general EuroVelo route selection

These criteria should assist in selection of the ideal EuroVelo route. A EuroVelo route should:

- run right across the European continent
- connect towns, pass through town centres and connect to important railway stations
- join together existing stretches of other cycle routes
- help to bring these existing routes up to the highest applicable standard
- have a clear theme, which will usually be geographic or cultural e.g. following a river or coastline, a pilgrim route
- be able to stimulate physical activity, environmental awareness and international contact throughout Europe
- help to fulfil the EuroVelo mission to link all European countries with at least one route
- while being reasonably direct, pass through as many countries as possible
- incorporate especially attractive cycling areas
- avoid monotonous stretches wherever possible.

In line with the five guiding principles, EuroVelo routes should also:

- be consistent in terms of user safety
- have consistent surfacing and avoid frequent changes between materials
- plan for safety, speed and comfort standards acceptable for cyclists with fully laden cycles and cycles of different types
- be adequately signed to guide visiting tourists
- have accommodation and refreshment facilities (shops, restaurants etc) available at regular intervals. We propose max. 25 km between these facilities.
- Water supplied within max. 20 km. (fountains etc.)
- guarantee a memorable cycling experience wherever possible
- be accompanied by up to date and reliable information aimed at visitors from other countries, as well as local users and including information on local laws and customs.

Finally the EuroVelo Guidelines propose some basic technical criteria for the routes:

- Shared on-road routes should normally carry less than 1,000 vehicles per day and only in exceptional circumstances more than 3,000 vehicles per day.

- Cycle lanes beside the highway should not be located alongside roads carrying more than 10,000 vehicles per day.
- Sections of route defined as “traffic free” may carry up to 50 vehicles per day.
- Traffic-free route sections should be wide enough for two cyclists to cycle side-by-side most of the time, with a desired standard allowing two pairs of cyclists to meet and pass safely. Variable widths are acceptable along a route.
- Gradients of more than 6% should be avoided where possible, although on mountain sections the maximum gradient may be 10% or greater.
- Routes should generally be open all year and in all weathers, although in the far north or in areas of high mountains this may not always be possible
- Alternatives should be considered for sections of route very heavily used by other types of non-motorised traffic (walkers, horse riders etc.); the priority is to minimise conflicts.



Via Verde in Spain safe for cyclists.



Shared road in Denmark not always safe.

3. Technical Definitions

Before providing a classification of cycling infrastructure elements, some definitions will be useful:

Cycle route is a track or road between two points A and B, which has been planned, laid and signed for cyclists.

Cycle route network is a coherent system of cycle routes in a defined area. A cycle route network can be at a number of different scales from a continental scale downwards - e.g. EuroVelo (continental), national, regional and local.

Cycle route corridor is a belt of land between 2 points to be followed by a future cycle route.

There are seven different types of provision which are made for cyclists and a cycle route may be made up of one or more of each:

1 Cycle lane: Section of the carriageway reserved for cyclists. This can be indicated by proper signs, a white line (yellow/orange/white in some cases) and the symbol of the bicycle painted on the

roadway - or displayed on a signpost -, (referred also to as *on-road cycle track or cycle shoulder*) reserved for the exclusive use of pedal cycles.

2 Cycle track: Track indicated by proper signs and the symbol of the bicycle painted on the track separated from road by kerb or grass verge (referred also to as *segregated cycle track*).

3 Independent Cycle track: a track indicated by proper signs and the symbol of the bicycle painted on track, reserved for the use of cycles and totally independent from shared roadways (referred also to as *cycle track in its own right*).



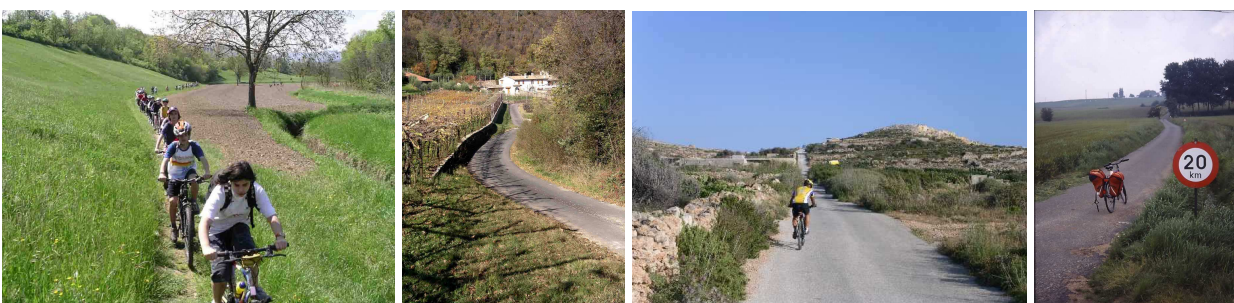
1. Cycle Lane Mallorca (Alcudia –Pollenca). 2. Cycle Track Malta, Halfar Road. 3. Cycle Track in separate layout. Lodi in Italy.

4 Natural Cycle path: path crossing parks and/or protected areas, the countryside in general or running along river banks. There are no specific construction standards and cycles may be admitted even in places where surface is rough for cycling. Note that for cycling purposes, the intrinsic safety of the cycling path must be guaranteed. (referred also to as *bike trail or single track*).

5 No traffic roads : roads that carry less than 50 motor-vehicles/day.

6 Low traffic roads: roads that carry less than 500 motor-vehicles/day and no more than 50 motor-vehicles/hour and not too much heavy traffic (lorries etc.).

7 Bicycle friendly road: non-urban shared road with some provisions and traffic calming facilities with a speed limit of 30 km/h or less, to improve safety for cyclists.



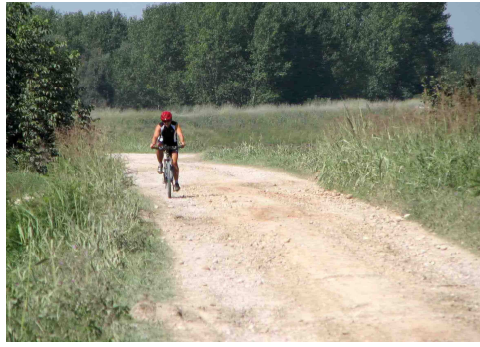
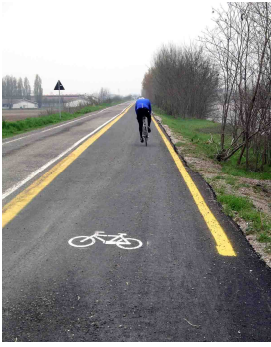
4. Natural cycle path. 5. No traffic road. Verona Italy. 6. Low traffic road. Malta, Popeye. 7. Bicycle friendly road.

Surface with at least three different levels of quality:

Sealed: (asphalt, concrete, self-blocking material)

Smooth: other good quality surfacing materials like fluent tarmac, soil stabilized with lime/resins

Natural bed: mediocre or low quality (grass, soil, river or cobblestones).



Mantova cycle Track asphalt. Po river route poor gravel surface. Cobble stones not so good surface.

Roadway: that part of the road used for the passage of traffic with the exclusion of shoulders, draining channels, barriers, respect areas, etc.

Greenway: former transport route made available to users of non-motorised transport such as pedestrians, cyclists, people with limited mobility, roller skaters, cross-country skiers, horse riders

Traffic safety: all infrastructure and legislative provisions implemented to ensure traffic safety.

Installed safety features: all the permanent road features designed to improve road safety (barriers, balustrades, repairs of steep or dangerous stretches of road, etc.).

Cycling sign: vertical or horizontal sign designed to provide cyclists with directions and to improve safety.

Resting area: Service area equipped with bike racks, tables, benches, waste baskets and drinking fountain.



Signed rest areas Funen Denmark, and at an old wind mill. and vias Verdes in Spain with sign for rest area.

Touring Bicycle: geared bicycle (MTB mountain bike included), suitable for carrying luggage and with tyres of not less than 25-28 mm in width.

Cycling maps: Road maps (cycle-maps) at scales of between 1:50,000 and 1:100,000. (for mountain bike routes or city centres a scale of 1:25,000 is acceptable).

Cycling maps can be of two types:

Itinerary Map: showing pre-determined cycling routes and supplying useful information of assistance in finding the way.

General Map: showing information about the road network most suitable for cyclists, such as traffic intensity, gradients and other information useful for a cyclist in deciding a route within the area covered by the map.

Classification of cycle routes

First of all it is practical to classify cycle routes into:

- European cycle routes
- National cycle routes
- Regional cycle routes
- Local cycle routes

A classification of this type helps in the administration and maintenance of the routes. It also provides a logical hierarchy for the different signs, which is easily understandable by the users.

Each country should define its own national cycle route network. Once this has been completed the regional authorities can work out regional routes etc. and put up signs to extend and improve the network. Cyclists will understand cycle route standards (including the relevant signs) better if the signs they come across are consistent throughout a particular country.

National guidelines for signing of cycle routes

Besides it is very important that national official guidelines for signing are developed and decided. Then the regions can work out regional routes etc. and put up signs to develop the network.

Planning method and co-ordination between sectors

The “Bicycle Tourism Temple Model” was developed as a method for Cycle Route planning while working on national cycle routes in Cyprus. The model includes both the necessary technical details and emphasises the need for sensitivity to natural and man-made scenery as well as the importance of the availability of tourist facilities such as bicycle-friendly accommodation etc. Proper co-operation between the route planning and tourism sectors is essential. The model provides an example of good practice in the planning of cycle routes, focussing precisely on this need for co-operation:

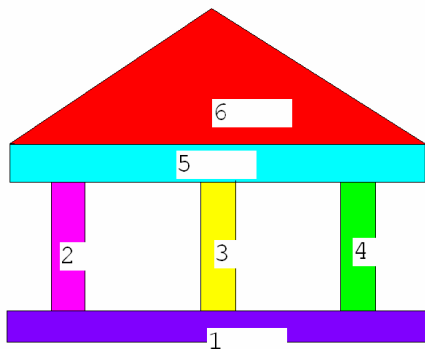


Fig. The Bicycle Tourism Temple Model.

- 1. The basics (Country, Climate, Landscape)**
- 2. Accommodation and other services**
- 3. Cultural and natural sights**
- 4. Infrastructure for cyclists including access and information**
- 5. Tourist Product for Cyclists**
- 6. Marketing**

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