Cerema

Direction technique Territoires et ville

Signs and signals for cyclists and pedestrians

Comparison of rules and pratices in 13 countries

THE PEP Transport, Health and Environment Pan-European Programme

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

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The Transport, Health and Environment Pan-European Programme (THE PEP) was established in 2002 by the United Nations Economic Commission for Europe (UNECE) and the Regional Office for Europe of the World Health Organization (WHO/Europe).

The objective of THE PEP is to encourage policy integration between the transport, environment and health sectors, particularly relevant Ministries as well as inter-governmental and non-governmental institutions and to promote sustainable transport, particularly in urban areas. More than 50 countries of North-America, Europe, Central Asia and the Caucasus are addressed by THE PEP and work together to collect and analyse evidence, to prepare and support studies and to organize capacity building vents, mainly in Eastern and South-Eastern Europe, in Central Asia and in the Caucasus.

One of the key areas of work of THE PEP since 2009 is the promotion of policies to increase active and inclusive mobility and to foster safe and healthy walking and cycling as part of sustainable mobility.

At a workshop organized by THE PEP in Batumi (Georgia) in September 2010, dedicated to promoting the use of active transport (walking and cycling), representatives of THE PEP participating countries presented their activities and experience in this field. Out of several avenues that might have a positive impact on the development of these modes, in-depth and shared knowledge of signs and signals for these two modes was highlighted. France, as a long-time supporter of THE PEP, proposed to develop an inventory of existing or planned rules and regulations as well as of best practices on signs and signals for cyclists and pedestrians covering a sample of countries in the UNECE and WHO/Europe region.

THE PEP secretariat

(UNECE and WHO/Europe)

1. Context

Private car ownership for travel, together with an increasing sedentary lifestyle for different segments of the population, is the source of a real public health issue: The lack of daily physical activity. Walking and cycling can both be used to travel while performing part of the daily physical activity necessary for our health. What is more, trips made on foot or by bike do not emit any pollution and they are an essential feature of the attractiveness of public transport networks as a complement. However, using walking or cycling to travel implies that the public space must be safe and attractive for walking and cycling and provides a sufficient area to do so.

While progress can be made by means of better infrastructure, it is obvious that even if the proposed public space is attractive for pedestrians or cyclists, the itineraries are often difficult to decipher for people not familiar with them. In addition, the concept of distance or time taken to get from one point to another is often difficult to understand for persons accustomed to making detours when travelling in a motor vehicle: Several studies have shown that users have a very limited and a not continuous knowledge of urban space, experiencing the town as an archipelago made up of islands in a sea of unknown spaces that separate them. This eliminates cycling or walking from the mental map of travel possibilities. This is why countries have developed signs and signals to guide pedestrians or cyclists by providing information on travel time to change mindsets. Signs and signals also illustrate in practice their rights in the public space.

Signs and signals, as a lever for the development of active modes of transport, is the purpose of this study.

The study has three objectives:

1. To take stock of existing rules and regulations for signs and signals applicable for cycle lanes or pedestrian footpaths indicating travel time on foot, by bicycle, rollerblade or any other active mode of transport.

2. To prepare a compendium of best practices for a sample of countries participating in THE PEP. The ultimate goal is to establish a document, reviewed and endorsed by experts working in the framework of the THE PEP, on signs and signals for green and active transport modes. The study could then be referred to by local authorities or States wishing to develop such types of signs and signals.

3. As decided by THE PEP Steering Committee and following its publication at the 4. High-level Meeting on Transport, Health and Environment (Paris, 14-16 April 2014), the study will be transmitted to the UNECE Working Party on Road Traffic Safety (WP.1) for consideration and follow-up action at pan-European and global levels. WP.1 is the guardian of several United Nations legal instruments harmonizing road traffic rules and regulations, including the Vienna Convention on Road Signs and Signals (1968) and the European Agreement Supplementing the Vienna Convention (1971). It is hoped that in this way THE PEP could provide a contribution to the current review of these important international legal instruments on road signs and signals and make an input towards promotion of active mobility and the facilitation of pedestrian and bicycle tourism.

Scope of the study:

The study focuses on the vertical or horizontal regulatory, direction, temporary, and tourist signs and signals of fifteen countries. Direction signs for feeders to or between forms of public transport also fall within the scope of the study. It deals with signs for cyclists, pedestrians and similar users (rollerblades, etc.), both in urban and interurban environments.

A diverse sample of countries was selected by the THE PEP to provide for a varied and comprehensive approach. Questionnaires have been sent to these countries. The replies received, complemented by research on the internet, have assisted in drawing up two factsheets per country (for pedestrians and cyclists). As a result of the answers obtained and following a review by the THE PEP Steering Committee in November 2013, factsheets for the following 13 countries have been developed and were used in the present summary: Austria, Belgium, Denmark, France, Germany, Italy, Norway, Poland, Russian Federation, Spain, Switzerland, United Kingdom and the United States of America.

2. Administrative and political organizations

The development of a policy for cyclists and pedestrians is often the result of the determination of influential and motivated people and of initiatives of user groups, such as very active associations and federations. Political decisions are translated into regulations instigated at various decision-making levels. Whether centralized or federal, the institutional set-up of the countries examined always leaves its mark on the way the political will is implemented. Different decision-making levels can play different roles: initiator, driver, controller and financier. Nevertheless, the State remains the guarantor of the regulations. Policies for the development of soft modes of transport appear more or less voluntary in terms of political organization. The uniformity of rules and signals greatly depends on the presence or absence of common rules that project developers must follow.

The 13 countries covered by the factsheets have different types of institutional organization. These are the legacy of history and peoples' choice. Thus, the degree of autonomy of each decision-making level varies irrespective of whether the countries have centralized or federal structures. The various country constitutions assign different competencies to each administrative and political level, even if the institutional structure of the countries appears to be identical. This makes it sometimes difficult to clearly understand the separation of responsibilities between those involved in such a project.

The development of rules and development tools in the area of cyclists and pedestrians depends largely on the presence or absence of specific policies reflected, in particular, by the introduction of national, regional or even local schemes, independently of the institutional organization of the country.

Centralized countries such as France and Denmark have adopted policies based on national cycling schemes with only local variations, as have certain federal states. For example, Switzerland and Belgium have introduced national schemes that are mandatory for the lower institutional levels of the federation. Conversely, countries with a centralized structure, such as the Italy, Poland or the Russian Federation or countries with a federal structure, such as Spain and Germany, either have not enacted national policies or have only partially done so.

The constitutions of States assign competencies or leave authority to regional, cantonal or local institutions or even associations. Depending on the country, these more or less extensive powers range from mere implementation of the national policy to the ability to legislate with a view to establishing their own rules. The heterogeneity of such practices is further complicated by the diversity, within the various administrative and political levels, of the structures in charge of policies for cyclists and pedestrians.

Depending on the competencies of these structures, such as tourism, transport, land use or road safety, the goals are different. A bicycle or pedestrian network created on the basis of tourism objectives will be different from a network developed from the point of view of transportation needs.

Because of this heterogeneous aspect of institutions, the chain of decision-making for implementation of cycling or pedestrian policies is also heterogeneous. The division of responsibilities between policy-makers and implementers is more or less clear depending on the political organization. In many countries, the decision maker is not always the one that picks up the costs. In centralized countries, such as in France, the central government is often the decision maker and the initiator of the project.

It then delegates implementation and financing to local authorities closest to the areas in question, such as “regions” or “departements”. In other centralized countries, such as Denmark and Norway, the State mainly drives the project, but delegates implementation and maintenance to local authorities. In federal organizations, it is mostly the “Länder” or regions that have competency for decision-making, implementation and financing within the framework set by the central government.

There are variations to this logic, such as in Switzerland, where, to ensure uniformity throughout the country, the entire framework is determined by the Confederation. Implementation is undertaken at the level of the “cantons” with the help of highly structured associations.

3. Organization of regulations

Countries have different levels of prescription for regulating the rights and obligation for active modes of transport. Countries, such as France, Switzerland, the United States and the United Kingdom, already have highly structured regulations both for direction signs (mainly for cycle lanes and for walking (Switzerland)) and for informative signs, while other countries have little or none. However, there is a common minimum basis: Regulatory signs. This has been codified by the Vienna Convention, which has been ratified by all countries of the European Union as well by all other countries included in this study (68 countries world-wide have acceded so far to this United Nations Convention) with the exception of the United States of America.

Apart from some local features, these regulations determine the requirements for the movement of vehicles, whether motorized or not, especially of cyclists, as well as provide instructions for pedestrian travel. Generally, they are codified in the form of a "highway code" or equivalent. Deriving from a law, decree or order, they apply to everyone in the country.

However, the signs enshrined in the Vienna Convention do not cover all needs, which led States to invent additional ones particularly to meet new requirements, such as active modes of transport.

In general, changes to regulatory signs (instruction, danger, prohibition, etc.) are the sole responsibility of the State. In some federal states, the central government allows changes to adapt to local conditions within a fixed regulatory framework. For example in Spain, the regions have considerable autonomy.

They may, under certain conditions, create signs showing specific instructions.

For direction signs for pedestrians, three complementary approaches can be distinguished combining rules and recommendations:

- *signs created by users, designated for hiking and adapted for use in urban environments, with small signs specifying destinations and travel time and a "coded language" using signs (marks) to specify difficult sections of the route and to reassure the user that he has made the right choice,*
- *dedicated signs for pedestrian routes inspired from road signs designed for urban environments*
- *the creation of specific urban informations, using, for example, street furniture (a totem with or without plans, a 2- or 3-dimensional photo, a directional rose, orientation tables, etc.), sometimes supplemented by variations of road signs tailored for pedestrians.*

Directional signs and signals for pedestrians

For direction signs for cycling, also three complementary approaches can be distinguished:

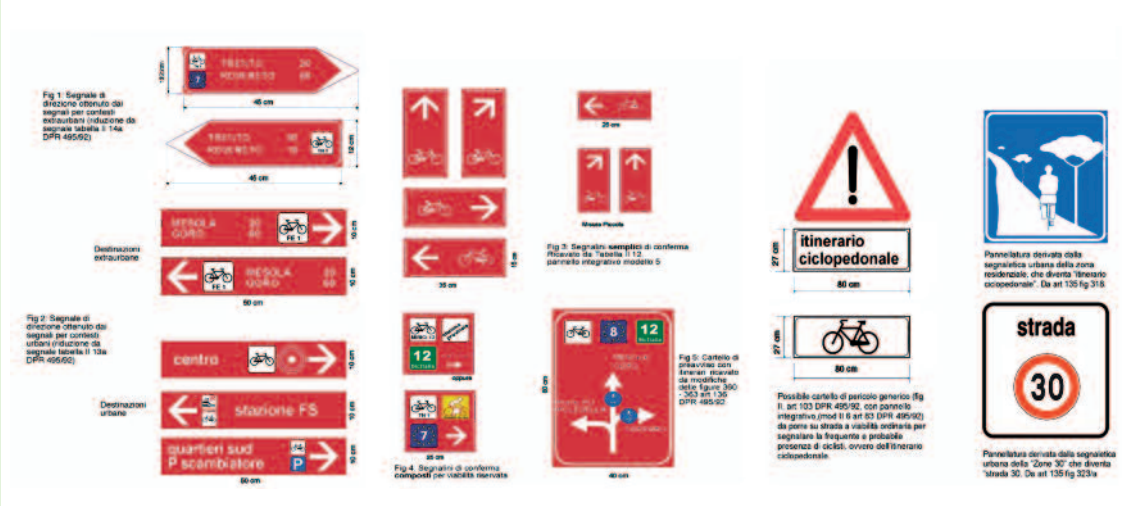
- *in urban and suburban areas, signs and signals derived from road signs with the addition of distances and the bicycle symbol on signs of a dedicated colour, sometimes supplemented by "service information" with a plan showing services and possible routes*
- *in urban areas, dedicated signs and signals created by users or inspired by road signs as a complement to the interwoven structured network,*
- *in suburban areas, signs dedicated to sports routes (mountain bike loops, cycling loops) with a colour code or numbering, sometimes supplemented by service information with a plan showing possible routes and services available on route.*

Directional signs and signals for cyclists

This common basis with variants mainly concerns warning signs, prohibitory and mandatory signs as well as signs for the management of intersections. Directional and information signs and signals are often tailored to the specific needs of the country.

While signs and signals for main roads are in principle similar in European countries, secondary network signs and signals show large disparities in the design of the signs (indications, colours, etc.) and in the way they are organized (network implementation, maintenance, etc.). Switzerland has the adopted green as the colour indicating main roads, whereas in Europe the colour blue predominates. The United States have also made a different choice. The same is true for road surface markings: in general the colour is white, but Switzerland uses yellow for markings relating to active transport modes.

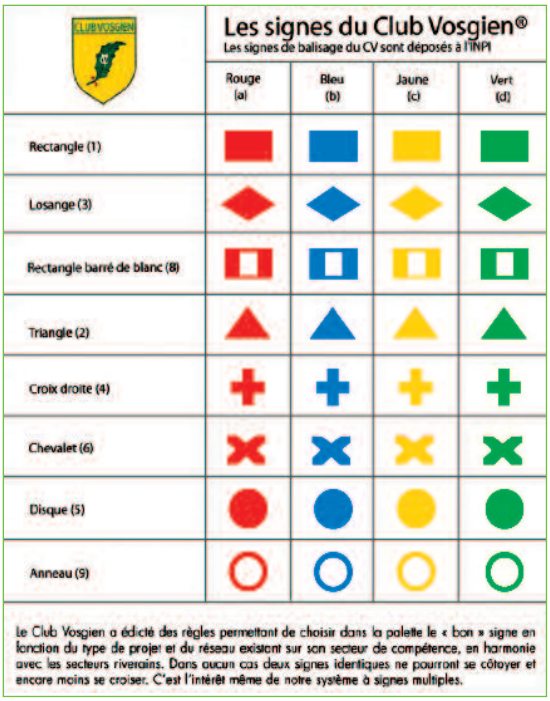
Some countries like Poland and the Russian Federation do not have specific regulations and signs and signals for active modes of transport: their commitment to a policy for active modes is too new and they have not yet started to create specific rules. All countries with special regulations have at their disposal a wide range of standards and guides giving recommendations drawn up by public authorities or by federations and associations of users that complement national regulations.



In Italy: direction signing proposed by the FIAB association

Special regulations are one of the characteristics of countries that have already begun to think about green modes of travel. Although Switzerland is a confederation of "cantons" with diverse customs, languages and political orientations, it has managed to define and enforce national legislation for all active modes: bicycles, pedestrians, mountain biking and skating throughout the territory. Other countries, such as Denmark, France and the United Kingdom have official regulations concerning direction signs for cyclists.

Formalizing the rule in this way ensures the homogeneity of practices within a territory. Federal countries, such as Austria and Germany have basic regulations. These impose the main characteristics of direction signs, such as the network hierarchy, the colour of signs, etc.



The central government leaves open the possibility of completing and customizing these regulations. In this way, "Länder" and regions draw up their own charter by which each "Land" or region tries to customize the message as much as possible. These approaches can lead to very specific products, often of high-quality, but they do not lead to a harmonization of such signs and signals.

Since 2004, Belgium and France and have adopted a series of additional measures in favour of active modes of travel. Developed as so-called "rules of the street" approaches, they reaffirm the principle of caution exercised by the strongest vis-à-vis the most vulnerable users (principle of the Vienna Convention).

These measures give priority to pedestrians in vehicle/pedestrian zones and make widespread use either two-way cycling on all roads in Belgium or in traffic-calmed zones in France. In this way they make use of good practices existing in other countries (combined vehicle/pedestrian zones in Switzerland, give-way to cyclists at red lights in the Netherlands, no-trough-road except for pedestrians and/or cyclists and cycle streets in Germany, etc.).

4. Signs and signals

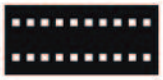
4.1. Regulatory signs (prohibition, instruction, obligation, etc.)

Regulations related to signs and signals established by the Vienna Convention (1968) is the common basis between all countries reviewed with the exception of the United states of America. Depending on the country, it is the only rule or basis for more detailed and specific regulations. Ratified by almost all, the Vienna Convention stipulates common minimum requirements for the movement of vehicles, but it leaves room for interpretation and customization of rules for the design of signs and their meanings.

Sign E17 was introduced by the European Agreement supplementing the Vienna Convention (1. May 1971). Of the countries analysed in this report, Spain, Norway and the United States have not signed, although Spain and Norway use the signs. The United Kingdom has signed the Agreement in 1971, but has not yet ratified it. However, it uses a sign inspired by the same decor.

Police signage for pedestrians and cyclists in the Vienna Convention

C3c	C3i	D4a	D5	D11a	D11b	E9d	E12a
							
No cycling	No pedestrians	Cycle path compulsory	Pedestrian footpath compulsory	Dedicated cycle and pedestrian lane; separate spaces	Dedicated cycle and pedestrian lane: common space	30 km/h max. speed zone	Pedestrian crossing (position)

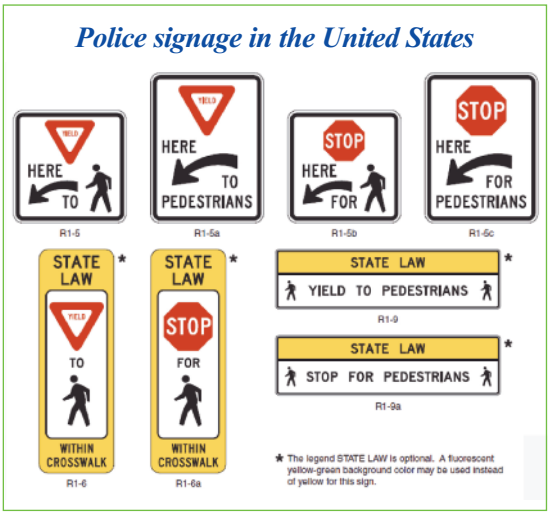
E12b	E12c	E17	F9	G20	G21	
						
Pedestrian crossing (position)	Pedestrian crossing (position)	Home zone	Symbol of a location used as the starting point of walking tour	Footbridge or underpass	Footbridge or underpass without steps	Marking showing cycle path crossing

The rules that vary only slightly by country are as follows:

- The rules that vary only slightly by country are as follows: Bicycles are considered as vehicles, so the cyclist has the same rights and obligations as motorists. In Poland, the Highway Code was amended in 2011 to give better consideration to pedestrians whose status did not exist before. In Austria, cyclists under the age of eight must have permission to travel alone on the road. In many countries, the bicycle is considered as a vehicle in a category separate from that of motorized two-wheelers.
- Signs for warning, prohibition, obligation and management of intersections for the movement of vehicles on roads are basically the same in all countries. Variants are found

in speed limits, which vary from one country to another, or in the colour of the signs whose background may be white, green, blue, brown or yellow;

- Surface markings are generally white except in Switzerland where yellow is used to indicate developments for green modes, and in the United States where yellow is widely used;



Differences exist mainly in regulatory signs for traffic in specific areas, such as pavements, cycle strips and lanes or in pedestrian areas. These signs are mainly for bicycle users and pedestrians sharing space with other users. These signs are usually made up of combinations of elements established in the Vienna Convention that are slightly modified. If a country wants to create a new regulation, the principle is that it uses the sign in the Convention, if it exists, or a variant thereof.

As society evolves, the desire to communicate and to prescribe different operating modes for public spaces with special operating rules compared to the general rule led to new specific signs that were invented for this purpose.

Therefore signs are often found in different countries that do not exist as such in the Vienna Convention. They often respond to the need to indicate prioritization or special traffic rights.

These regulatory signs and signals (prohibition, instruction, obligation, etc.) can be of three kinds:

- Regulatory signs and signals common to pedestrians and cyclists;
- Regulatory signs and signals for pedestrians only;
- Regulator signs and signals for cycling only.

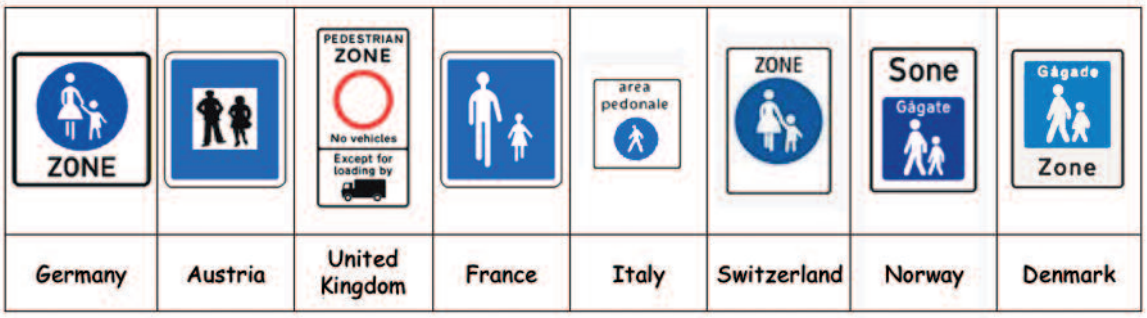
4.1.1. Regulatory signs and signals common to pedestrians and cyclists

We will first present signs and signals to identify the operating rules for public spaces (pedestrian areas, residential zones, combined vehicle/pedestrian zones, greenways, areas with limited traffic, shared pavements and quiet roads), followed by signs and signals relating to crossings (mixed crossings, pedestrian/cycle lights, assistance for crossing, continuity of routes (no through road, except for...).

4.1.1.1. Signs and signals for operating rules of mixed public spaces

• *Pedestrian areas*

The relevant sign for this provision may be found in the Vienna Convention in different forms and in many countries (sign D9 including sign D5).



However, not all countries accord to this sign the same regulatory meaning. In some countries, it is only an indication, while in others it includes requirements as to the speed vehicles must comply with (often around 6 km/h) and on access (limited to service). Depending on the country, the authorisation given to cyclists to ride in a pedestrian zone either comes as part of general regulations (which is good for cycling) unless otherwise indicated, or it is managed on a case-by-case basis. In some countries, the sign shows an adult and a child, with the child in certain cases giving his hand to the adult.

• *Residential areas*

Such signs are provided for in the Vienna Convention (E17a) and are found in many countries.

They do not indicate restricted access for vehicles. In some countries, these signs also provide for a speed limit of 7 km/h. Pedestrians often have priority. As their name suggests, they concern homogeneous areas where there is housing, but do not respond to the problem of areas which are used in different ways (shops and housing, for example) or roads where traffic continues to transit in reduced volumes.

The signs show the presence of homes in the shape of a house or a block of flats. The pavement is rarely shown. Children are present, sometimes playing with a ball. Most countries show a car, but no driver. There are no cyclists on the signs.

• *Combined vehicle/pedestrian zones*

These zones have appeared more recently and are an extension of the principles of the residential area. These are areas where pedestrians have priority over all vehicles. They include residential areas, but also the busy roads, squares and shopping areas.

Pedestrians can walk on the roadway. Vehicle speed is limited to 20 km/h and parking is allowed only in identified spaces. Cyclists have the right to ride in both directions of traffic. Unlike in pedestrian areas, access for motor vehicles is not limited to service needs only.

		
Switzerland	France, Austria	Spain, Belgium (E17a)

To show that these are no housing areas, some countries, such as Belgium, while keeping the residential area sign, have changed the way it is used. Switzerland has removed the child playing with a ball. It has also removed the reference to the pavement and displays a speed limit. France has created a special sign: no children are shown (the fact that they play in the street is the sole responsibility of the parents), the speed limit is shown as in Switzerland, there is a driver in the car, and he is watching a pedestrian going by. A cyclist has been added. Finally, since this is a public space in an urban area, there are no references to housing. Since the pedestrian is walking on the roadway, there is also no longer any reference to the pavement. The French sign is also used in Austria since March 2013.

• *Greenways*

					
France: greenway	Norway: track for pedestrians and cyclists	Spain: road for cyclists and pedestrians	Belgium: path for cyclists, pedestrians and horse riders	Denmark: path for cyclists, pedestrians and horse riders	Denmark: separated paths for pedestrians, cyclists and horse riders

These roads are reserved for pedestrians and cyclists. Motor vehicles are not allowed to run or park on them. France has created a special sign to identify these greenways. The sign is green on a blue background with the symbols of users allowed on them. It therefore stands out from all the other traffic signs. Other countries prefer to vary elements from the Vienna Convention by showing a horse rider. The dominant colour is blue. The areas of the path in which different users are allowed are sometimes separated.

• *Limited access areas*

In areas with low emissions, access can be granted to vehicles according to their emissions. This may have an effect on the quality of pedestrians and cyclist mobility via a reduction in traffic, noise and local pollution, as long as few cars meet pollution standards.

Italy has created "ZTL" areas in which motor vehicle access is limited. This regulation distinguishes vehicles by local service needs and is not related to emissions. It aims to reduce traffic by diverting through traffic, regardless of the engine used in the vehicles. The reduction in the number of motor vehicles allowed tends to favour cycle and pedestrian traffic and increases their comfort and safety.

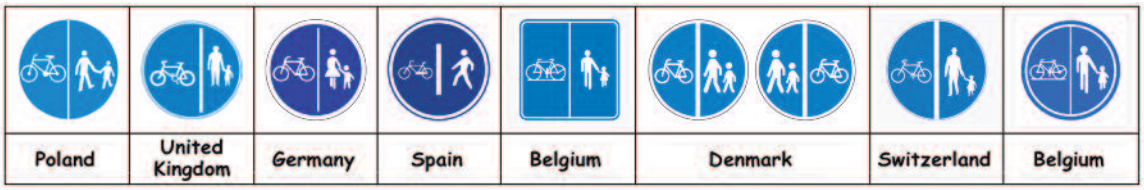
The sign is zone-based (rectangular) with a red circle indicating that vehicles are prohibited, to which is added a plate indicating the exceptions to this prohibition.

This regulation means that through traffic can be excluded while still allowing service access. It does not give absolute priority to pedestrians (unlike the pedestrian area) and helps buses to run at commercial speed; it also means that a relatively high speed can be maintained for "cycle express lanes" to encourage people to use this mode for daily travel over longer distances. In France, the city of Nantes has recently started to test this concept.

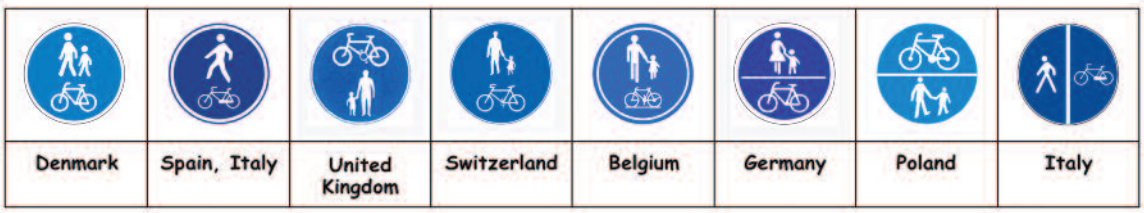
• *Separating or mixing pedestrian cycle paths*

This option features in the Vienna Convention (D11a, D11b), but has not been transposed into national legislation of several countries, such as France. This sign shows that cyclists can ride on some pavements, either with separate pedestrians and cyclist flows or by sharing the same space without any separation. It usually has a blue background with symbols for pedestrians and cyclists.

Pavements shared with separation (D11a)



Pavements shared without separation (D11b)



• *Quiet lanes in the United Kingdom*

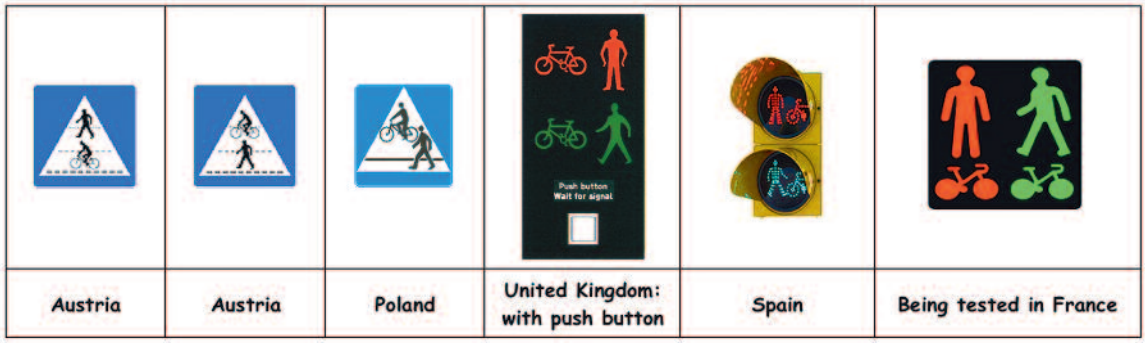
This panel is used on roads without any special development and with a small amount of motorized traffic travelling at moderate speed.

Drivers of motor vehicles are made aware of the high probability of the presence of pedestrians, cyclists and horse riders on this route. This sign has not been reported to exist in other countries.

4.1.1.2. Signs and signals for pedestrian and cycle crossings

• *Signs and signals for pedestrian and cyclist crossings*

While many countries have signs to indicate the position of, or an alert for, a pedestrian or cyclist crossing, there are few that indicate a common or adjoining crossing (pedestrian+cyclists). Austria and Poland have special signs to indicate when the two modes share the same place for the crossing. This sign with a blue background shows a pedestrian and a cyclist on a marked crossing, within a white triangle.



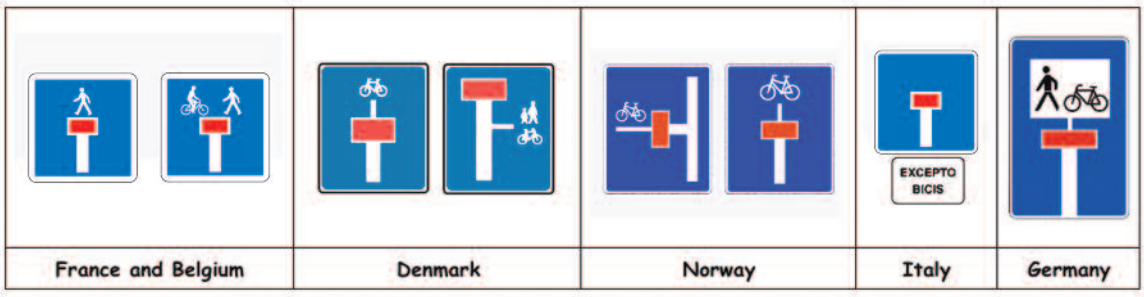
Austria	Austria	Poland	United Kingdom: with push button	Spain	Being tested in France

In Austria, it is used to position the crossings and therefore to show motorists what user will first be encountered. In the same way, many countries have two-phase pedestrian/cyclist lights indicating the possibility of a common or adjoining crossing, such as Spain, Switzerland or the United Kingdom. Belgium and France are in the process of testing these subjects. Belgium is testing a three phase light.

4.1.1.3. Signs and signals to indicate the continuity of pedestrian and cycle routes

• *No-through-road except for pedestrians* (and cyclists)

France and Belgium have recently taken up such signs which existed in several countries such as Denmark, Germany, Italy, Norway, Spain or Switzerland. This panel informs cyclists and pedestrians that the no-through-road applies only to motorized modes and that active modes are not affected. Making "smart routes" known is part of the promotion of active modes which are becoming competitive for short distances and can make use of shortcuts without encountering traffic.



France and Belgium	Denmark	Norway	Italy	Germany

• *Signs indicating Busstop for buses accessible to cyclists*

Spain has created special sign informing cyclists at which busstop will they be able to get a bus accessible to cyclists.

• *Signs for ferries carrying cyclists and pedestrians*

Denmark has created special signage informing cyclists and pedestrians of the existence of a ferry intended for them.

4.1.2. Regulatory signs and signals for pedestrians

We will first present the signage for pedestrian crossings, and then look at pedestrian route continuities.

4.1.2.1. Signs and signals for pedestrian crossings

United Kingdom has got 7 types of passenger crossing : basic, basique, Zébra, Pelican (Pedestrian Light control), Puffin (Pedestrian user friendly Intelligence), Toucan (Two can cross), Pegasus (Toucan for horseriders). In France, Toulouse is currently testing a signal for pedestrian crossing outside junctions. It is working only when a pedestrian is detected.

- ***Signs for a light-controlled pedestrian crossing for tramways or railways*** *(level crossings)*

In France, to differentiate light-controlled crossings for a route dedicated to guided transport (trams and trains) from that of an ordinary road, a special light has been created to draw pedestrians' attention to the potential danger.

This light is out at rest when no traffic is present on the track and changes to a flashing red when a vehicle passes. It has been fitted with an audible signal for the blind and visually impaired.

- ***Signs for a crossing for the frail or disabled***

Britain has created signs to alert unaccustomed drivers to the high probability of frail or disabled people crossing.

- ***Crossings where a person is present***

To assist people crossing are indicated by a special sign in Germany. It is used to warn motorists when approaching schools, for example.

- ***Organising pedestrian flow at crossings with many people***

In the Russian Federation a special marking has been established indicating where pedestrian must stand to increase efficiency in crossing when pedestrian traffic is very heavy. This makes it possible to increase the "speed" of crossing the road.

- ***Signs indicating skiers crossing***

In Norway a special sign is used to attract drivers' attention to the high probability of encountering skiers crossing the road.

4.1.2.2. Signs to show continuity of pedestrian routes

- ***Accessibility to routes for people with reduced mobility***

Many countries have signs to draw users' attention to difficulties facing people with reduced mobility as they move around (under- or over-passes with stairs that cannot be used by people in wheelchairs).

				
Belgium, Russia, Poland, Denmark, UK, Spain, Switzerland, Italy: pedestrian crossing with change of level (G20)	France: route accessible only with difficulty for wheelchair users	Spain: cycle crossing with change of level	United Kingdom, Italy: ramp for pedestrians and people in wheelchairs (G21)	Poland: escalator

They also inform them of the presence of a ramp making the route accessible for them or a facility to help negotiate a change in level that can also be used by cyclists. In Spain, this sign is also applicable for cyclists.

• Signage indicating pedestrians on the road.

Poland has defined signage to draw drivers' attention to the fact that pedestrians are very likely to be on the road.

This signage is very useful during special events or in areas that do not have safe pedestrian paths (no pavements or unusable ones).

4.1.3 Regulatory signs for cyclists

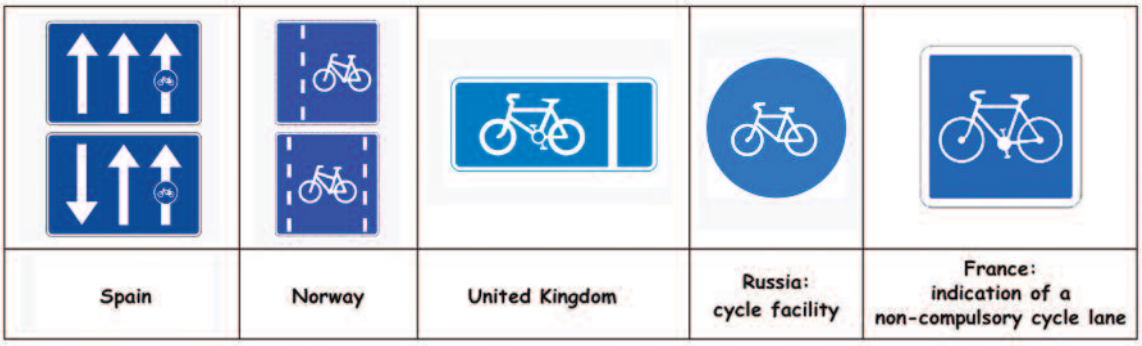
We will first present those signs that identify the operating rules for public spaces where cyclists ride (cycle lanes, bus lanes open to cyclists, "two-way cycle lanes", cycle streets, cycle runs, rider width limit), and then present signs relating to the priority rules when crossing.

4.1.3.1. Signage for operating rules of public spaces for cyclists

• Indicating a cycle lane

Most countries have signs to indicate the presence of cycle lanes or paths. These signs are based on the D4a sign of the Vienna Convention. France has introduced a square sign meaning that the cycle lane is optional for cyclists, while the round sign makes the facility compulsory (this allows groups of cyclists or cyclists moving at speed to stay on the main road when the facility is narrow).

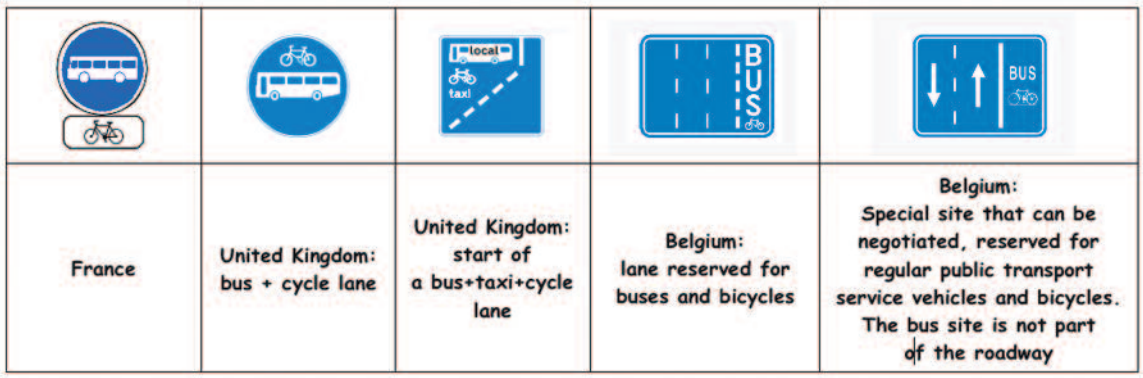
Norway, Spain and the United Kingdom have special signs to explain how roads are partitioned into lanes, including a cycle lane. In France, the marking with a bicycle symbol and a dashed separating line are sufficient; this regulation lighten signs and reduce obstructions on pavements.



Spain	Norway	United Kingdom	Russia: cycle facility	France: indication of a non-compulsory cycle lane

• *Indicating a bus (or other) lane accessible to cyclists*

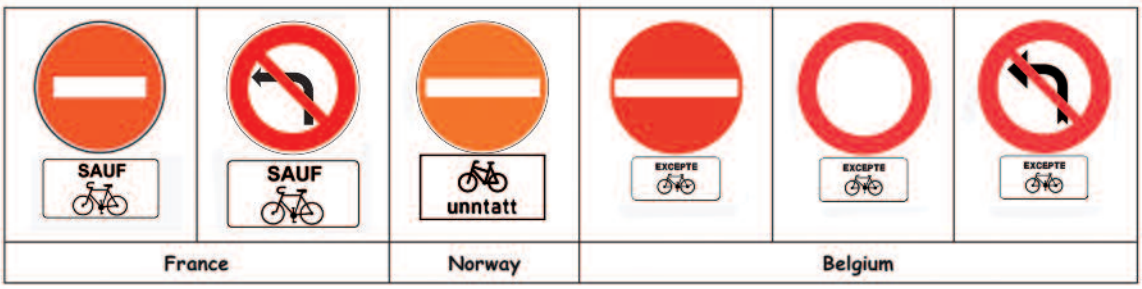
This sign provides cyclists with a safe space in urban areas where available road space is often limited. All signs have a blue background. Some countries include several users, while others prefer to add a plate. Some signs show how lanes are assigned and the direction of traffic flow. Many countries complement this vertical sign with “BUS" ground markings together with the cycle logo.



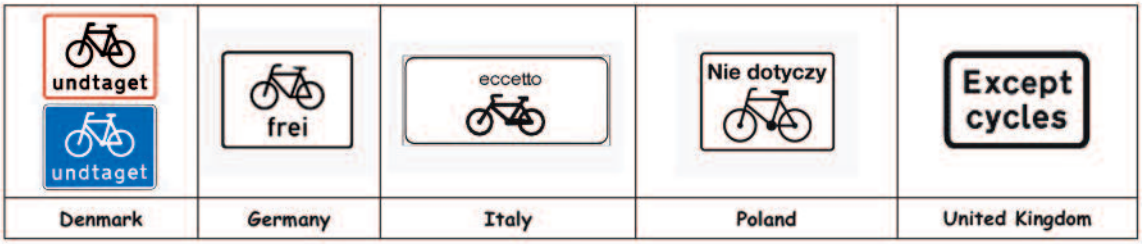
France	United Kingdom: bus + cycle lane	United Kingdom: start of a bus+taxi+cycle lane	Belgium: lane reserved for buses and bicycles	Belgium: Special site that can be negotiated, reserved for regular public transport service vehicles and bicycles. The bus site is not part of the roadway

• *Permission for cyclists to travel in the opposite direction from the rest of the general traffic in a one-way street*

The same principle has been adopted in most countries: A no-entry sign together with an "except for cyclists" plate in the language of the country, often with a cycle symbol to show the direction reserved for cyclists. This principle is used for other prohibition signs.

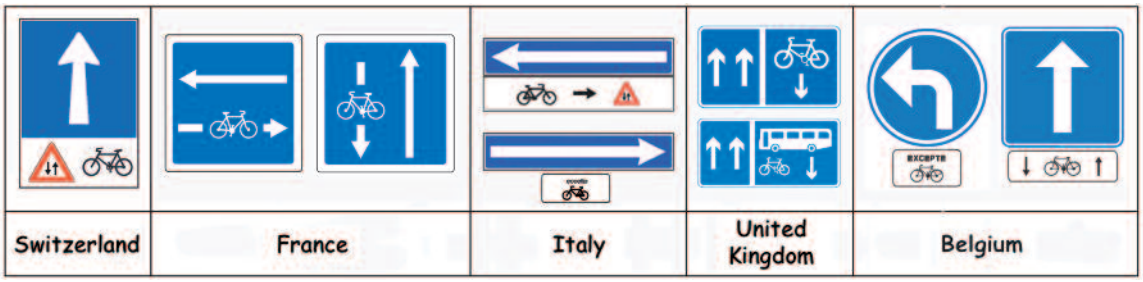


France		Norway	Belgium		



Denmark	Germany	Italy	Poland	United Kingdom

Cyclists riding in the opposite direction can be indicated by a sign on blue background (with the traffic flow direction and the users shown) to alert motorists of the authorization given to cyclists. When the direction reserved for cyclists is shared with buses, some countries prefer to indicate all users of the reserved lane to better alert other road users of their presence, especially at intersections. Others have a policy of including only a single user (often the largest) on the sign to simplify reading, at the risk of less noticeable and more vulnerable road users being forgotten.

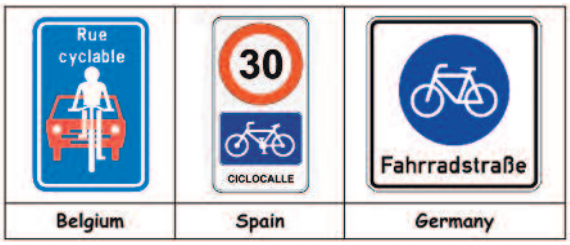


• *Sign to indicate "waiting lanes" for cyclists*

Many countries use ground markings to indicate waiting lanes for cyclists at intersections. Belgium uses signs in addition to this marking to allow cyclists to move in front of motor vehicles when the traffic lights are red to facilitate their manoeuvring.

• *Cycle streets*

Belgium has accepted the sign used in the Netherlands to indicate that overtaking a cyclist is forbidden. This introduces the concept of a street where cyclists are allowed to ride in the middle of the lane and where motor vehicles have to stay obediently behind them, providing better riding comfort.



Cyclists have priority over motor vehicles, which are prohibited from overtaking them in these cycle streets. Spain also has cycle streets in its regulations: The maximum speed is 30 km/h and priority is given to the cyclist. This regulation means that cyclists can use urban routes on which safety and comfort are guaranteed. Cars are, so to speak, only tolerated.

This concept is similar to the German "cycle street" reserved for cyclists (possibly also available to vehicles of residents, who must then drive at less than 30 km/h) which is indicated differently.

• *Indicating the width limit for cycles*

Poland has developed a sign stating that access is denied to cycles with a width of more than 90 cm. This signs may be particularly useful when a section of the cycle facility is narrow, especially when the use of tricycles is encouraged, e.g. for local delivery of goods.

• ***Indications of places*** where cyclists should reduce speed are necessary where cycle routes for cycle racing have been created, such as in Spain.

• *Indicating the difficulty of a cycle route*

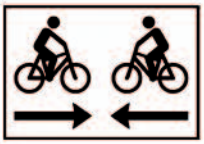
Switzerland has defined a plate to indicate that the route is for mountain bikes.

• ***Rollers*** can be used in Germany in 30km/h zones or on roads and trails when a special plate is used in conjunction with signs.

4.1.3.2. Signs and signals for priority at cycle crossings

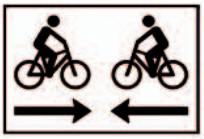
• *Indicating an intersection with a cycle route*

Italy, like France, indicates a potential danger, but the sign does not indicate where the cyclists may be coming from. The danger message, which is essential, is indicated by the triangular shape of the sign. Some countries "guide" the cyclist; however, while this gives better information, it maintains the ambiguity when crossing a two-way track (with cyclists coming from the right and from the left). Germany has a plate that alerts drivers of the likely presence of cyclists crossing; arrows indicate from which direction they may appear.

				
Germany: cyclists arriving from both sides	Norway, Denmark, Italy: cyclists arriving from both sides	Italy, France, Russia, Spain United Kingdom, Norway, Belgium and Austria	Switzerland	United Kingdom

• *Indicating the beginning of a bidirectional cycle path*

Germany has a sign to indicate a bidirectional track; this indication is generally established in crossroads.

		
Germany	Denmark, Norway	Italy

• *Managing end of priority*

Belgium has developed signs to indicate the priority systems for both cyclists and drivers of other vehicles. These signs allow non-priority users to know who has priority, or to specify to whom the loss of priority is addressed to.

B 1 + M 1

Drivers (cyclists) must give way to other users

B 1 + M 9

(Car) drivers must give way to cyclists

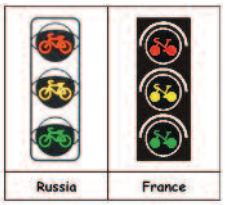
B + M 1

Drivers (cyclists) must stop and give way to other users

B 5 + M 9

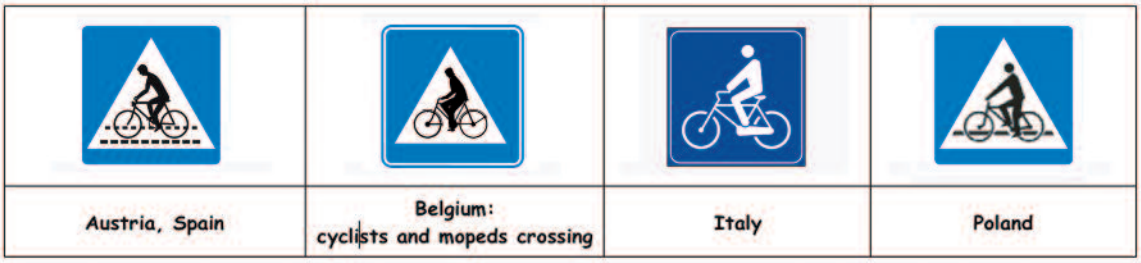
(Car) drivers must stop and give way to cyclists

In most countries there are also special three-phase lights for routes used by cyclists only. Two of them are shown here.



• *Indicating a road crossing reserved for cyclists*

Austria, Poland and Spain and have signs to indicate that a cycle path crosses a road. In Belgium this sign also applies to mopeds. This sign, similar to that used for pedestrian crossings, is to alert drivers of an impending cycle crossing.



• *The cycle give-way sign when turning right at traffic lights*

Adopting the Dutch practice of authorizing a right turn at red traffic lights, France uses a special plate mounted on the post of the traffic light to indicate this, instead of using a text as is the case in the Netherlands, which may be incomprehensible to foreigners. This approach is also used in Belgium.

This regulation allows cyclists not to stop when the lights are red if they want to turn right or go straight (at a T-junction), but they must give way to pedestrians crossing as well as to users for whom the lights are green, hence the choice of a red give-way triangle.

The way the signs, the services and the markings are formalized is less well defined. These plates can be easily adapted to local contexts. So this category has a wide variety of plates.

In many countries, regulations allow for the creation of these special plates.

4.2. Direction signs

Unlike regulatory signs where many similarities can to be observed between countries, direction signs are very heterogeneous.

The analysis shows that three main types of direction signs are used: Direction signs using directional indications, direction signs using marks and direction signs using plans. These direction signs could be inspired by normal road signs, by adding a pictogram or by being more tourist-oriented or utilitarian (loops, etc.). In the latter case, they are generally not regulated.

4.2.1. Direction signs using directional indications

The formal rules for direction signs using a system based on directional indications is one of the measures taken by countries that are developing or wish to develop an ambitious policy for cyclists and pedestrians.

Drawing up such a set of regulations requires the involvement of all parties, especially institutions holding legislative and regulatory powers. It is often initiated by the central government and imposed on local authorities, as in Denmark, France or Switzerland.

In other countries, the central government establishes a regulatory framework and leaves the way open for local authorities to define their own rules, though these must be within the given framework as this guarantees that the messages will be homogeneous to a certain extent. This situation is found in countries with a federal structure such as Austria, Germany and Spain.

4.2.1.1. Direction signs for pedestrians using directional signs

Switzerland has introduced general regulations. Using its network hierarchy, its regulations are used to provide direction signing for all types of pedestrian routes.

Other countries have also included pedestrian direction signing in their regulations.

Common aspects of pedestrian direction signing:

- *a colour or choice of colours,*
- *formats,*
- *the pedestrian symbol, sometimes with details about the accessibility of the route,*
- *journey times.*

Illustration of the swiss system

The signs are variable in size: The speed at which the pedestrian travels means that the size of the characters is of less importance. The colour of the signs or the presence of the pedestrian symbol generally makes them easy to identify. However, the signs must be sufficiently readable taking into consideration its location (if it is on the other side of the street, for example).

In Belgium (Flanders region) interconnected networks of focal points have been created for rambling. For each network, the rambler must be able to hike for three days consistently on different routes Intersections called "focal points" are numbered. These numbers form the basis for localisation within the network. At directional changes and at the focal points, the name of the following focal point(s) is indicated on dedicated signs. The rambler therefore walks from focal point to focal point on the route.

France direction signs

Flanders interconnected network of nodes

There are several approaches to pedestrian direction signing:

- *as feeders to public transport (train, metro, etc.) or car parks,*
- *as routes from public transport (train, metro, etc.) or car parks,*
- *as the link between two modes of public transport (from a metro to a tram or to a bus, for example),*
- *as access to areas of interest for pedestrians (public buildings, etc.).*

Note that some countries like Switzerland are taking strong action as regards intermodality by including urban and interurban travel on foot. The starting points for hikes, for example, are indicated in the urban environment as soon as one arrives at the rail station, a feature rarely found in other countries where it seems that the only possible starting point for hiking is a car park.

4.2.1.2. Direction signs for cyclists using directional indications

With the development of the EuroVelo cycling routes, the Consolidated Resolution on Road Signs and Signals (RE2) introduced the EuroVelo route information panel in Annex XIa as well as examples for incorporation of the EuroVelo route information panel in Annex XIb.

This Resolution is shown in national regulations and is often added for major cycle routes, such as the network of cycle routes and greenways in France or the Ravel and LF networks in Belgium.

These directional signs are organized in a similar way as road signs. Graphic charters specify the dimensions, shapes, fonts and colours to be used.

Common aspects of cycle direction signing:

- *the bicycle symbol,*
- *the route logo,*
- *towns or places nearby,*
- *distances.*

Switzerland has introduced general regulations. Using its network hierarchy, its regulations are used to provide direction signs for all types of cycle routes.

In the absence of official rules or in addition to these, some countries have charters for cycle directional signs. They are often initiated by villages, towns or regions for local routes such as urban networks and loops for tourists or by associations for regional or national networks.

These are high quality systems and provide the necessary information to users. But this signs often have very local and customized features that make them more difficult to contribute to the creation of connected and homogeneous networks over a larger area . It is not uncommon to see one route overlaying another with different direction signs.

The two approaches for cycle directional signs:

- *the first considers the bicycle as a vehicle like any other and only gives direction signs for its routes if they are separate from road routes; this choice satisfies the objective of not saturating users' vision with too much information,*
- *the second seeks to ensure continuity of the main cycle routes, including when they are superimposed on road routes; the objective is to guide a cyclist from one end of the route to the other and make it easier for him to obtain information.*

In Italy

In Norway

In Spain

In the Switzerland

In Austria

In France

In the USA

In the region of Flanders

In the urban environment, in order to have an impact on mindsets, some cities like London for its cycle Superhighway or Nantes choose to include travel time by bicycle.

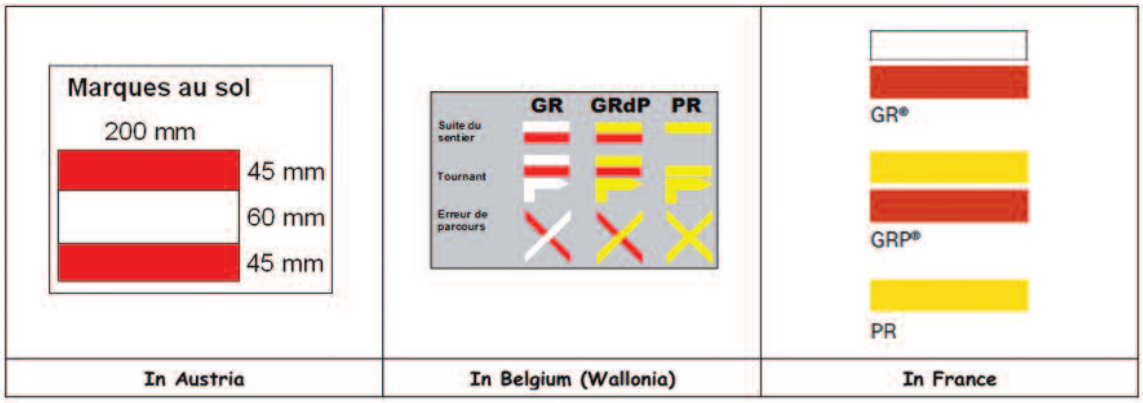
Based on an average speed of 12 km/h on clearly identified, properly adapted routes, the city uses fixed signs with travel times in the city centre, fixed signs with travel times and distance in suburban areas and variable message signs to compare travel times by mode for known user destinations, showing the advantage of the bicycle at peak times over other modes of transport (e.g. between the central business district and the first ring: bus 17 min, cycle 10 min, car 25 min).

4.2.2. Direction signs using marks

4.2.2.1. Pedestrian direction signs using marks

- The pedestrian walks at a speed at which small marks are sufficient. He is mainly looking for the answer to two questions: Am I on the right route? *(he wants to be reassured)*
- At this point where several options are available, along which way does my route continue?

Unofficial marking systems have been developed to mark pedestrian routes. Marking may be made with the paint on the ground, on trees or other supports and by plaques with geometric figures. Different colours and figures provide users with route identification, a guide and a direction. This principle has the advantage of simplicity. It provides immediate identification such as, for example, the major hiking trails in France. This type of marking is primarily set up and maintained by associations because it requires little technical expertise and is inexpensive. It adapts to most situations and it is easy to be maintained.



The smallness and limited intrusiveness into the visual landscape of these marks mean that a high level of continuity can be maintained at intersections or in confined spaces. This direction signs are not restricted for use over long distances: there are also some in the urban environment. These signs are generally for tourist or hiking use, but it could also be useful to mark continuities in commercial routes between major hubs.

The codes usually consist of:

- *one or more strokes of colour to assure the user that he is on the right path,*
- *a mark to indicate arrival at an intersection, or the need to turn off,*
- *a mark to indicate that one should not leave the route at this point (e.g. a cross).*

4.2.2.2. Cyclist direction signs using marks

There are various practices based on the principle of reassuring marks during sections of the route and as the route continues at intersections.

London cycle Superhighway icons

For London Cycle superhighways, in order to remind users what the route is intended, road markings consisting of regularly occurring pictograms of a bicycle have been used. To these icons are added reminders of the number of the route being followed.

Brussels uses “chevrons” to indicate a route in addition to signs and cycle logos.

The user knows that if he follows these marks he is on one of the main routes that he identified when preparing his trip.

Photo credit: IBSR

Cycle route continuity mark in Brussels

4.2.3. Direction signs with plans

Switzerland : Information board indication

Plans are used in all countries and are an effective tool to guide and direct pedestrians and cyclists or motorists in urban areas. They are also essential on information and service relay signs. These signs are placed at strategic points along the routes: the start of routes, car parks, crossroads, bus shelters etc. They give users an overview of their route and indicate its main features. They can also provide information on local services such as accommodation, where to eat and health.

To read a plan, one has to stop and take note. It contains a lot of information, requiring some time to understand it. Whether you are a cyclist or a pedestrian, the plan requires a space where you can stay for as long as it takes to read, work out the localisation and make a decision when there are several options. Plans cannot therefore be placed just anywhere and often require other forms of additional direction signs and signals.

4.2.3.1. Pedestrian direction signs using plans

Examples of "utility" direction signs using plans are rare. During the Olympic Games, to help the large numbers of pedestrians move around in London, the city marked out part of its network using plans to help locate oneself and so-called “totems” for guidance.

United Kingdom - London | France

In town, plans are the only way to show the pedestrian his position and to indicate the streets in the neighbourhood and all the points of interest nearby or further away.

This cannot be achieved by direction signs alone. It is therefore particularly important that they should be easy to read for everyone.

To take account of the need to work on people's mental maps, distorted by motorized travel modes (traffic plans with their hierarchy of roads and one-way streets force users to make detours and thus distort the perception of distance), the indication of travel time is a very important factor in providing awareness of how near places are on foot.

Legible London: the principles

These standardized signs take the form of totems providing high visibility in two formats, and using highly contrasting colours for optimum readability. These totems are new "stations" devoted to walking, providing, as it were, an extension of the transport services on offer largely catered for by public transport stations.

They include, from top to bottom:

- *the "pedestrian" symbol;*
- *the address of the sign;*
- *a set of information giving directions to particular sectors or places;*
- *a so-called "15-minute" orientation map, in which a circle shows the limits of the area reachable by walking for 15 minutes, and showing how close the neighbourhoods are to each other;*
- *a more detailed so-called "5-minute" local map, showing the pedestrian his destination within a circle corresponding to a 5-minute walk;*
- *a list of streets as on ordinary maps, because people are attached to this conventional mode of accessing information;*
- *at the bottom of the sign, the usual "North-South" orientation.*

It should be noted that these maps are designed to be effective tools for understanding, identifying and guiding, particularly suitable for pedestrians. They provide keys to understanding that facilitate and encourage the natural process of developing their own mental map: "heads-on" orientation, with maps oriented to face the same direction as the user is facing, information on accessibility and ease of use (steps, pavement widths, pedestrian crossings), travel time on foot, inclusion of 3D views of buildings or key places (makes map reading more intuitive), bus stops, metro stations and taxi ranks, "you are here" markers.

These maps are placed on the sign at a height of between 0.90 m and 1.80 m above the ground.

The orientation of the plans, using the geographer's approach (north at the top of the plan) is often at odds with the vertical positioning of the plan: the pedestrian can see the part of the city which lies behind his back presented at the top of the plan, which is counter-intuitive. The use of photos or drawings showing facades visible from the place where the map is located can help orientation.

Using bus shelters as media to guide pedestrians by combining maps, distances, direction signing and marks may be a way to improve the way public transport operates. When users are not familiar with a place, they do not know what the walking distance to the next stop is. Rather than wait 15 minutes outside peak times, a pedestrian may well choose to do 5 minutes on foot; similarly, at peak times when buses are overcrowded, pedestrians may choose to walk for short journeys, thereby restoring some comfort and relieving the existing line for other users. This is also one of the challenges of Legible London.

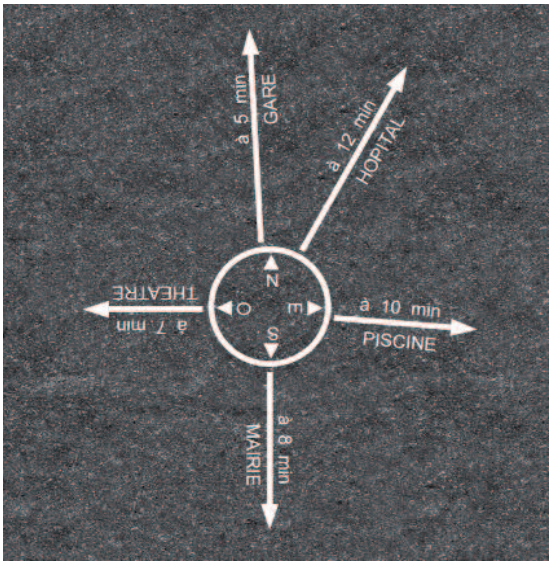
This direction signing may also indicate an alternative route to allow incidents to be managed (for example, in Paris for metro lines 9 and 10: instructions tell pedestrians how to walk from one station to another station on a different line when one of these is momentarily paralysed by an incident).

On some sites, the horizontal orientation table plays a complementary role, allowing users to find their way.

The urban equivalent is rarely to be found. Discussions are, however, under way on the subject with projects for directional roses for wayfinding.

It is easier to read information on the ground that when it is displayed higher up on signposts.

Care should nevertheless be taken not to position the indication on the ground at a place where it could be obscured by crowds of pedestrians.



4.2.3.2 Cycle direction signs using plans

The need for the rider to be able to stop and read a plan means that plan can only be a part of a wayfinding system.

The cyclist needs enough space to stop safely or park his bike and then read the plan, find where he is and remember the relevant information.

The plan remains important, however, especially when setting out on a cycling trip, to indicate all the services on a route or near an urban area.

• *Lessons learnt for direction signs*

This inventory shows that the practices for direction signs are those that present the most significant differences between countries in terms of quality, design, use and maintenance.

Several factors help explain what contributes to this diversity of special signs:

- Entrenched traditions: The population of countries, such as Belgium, Germany and Switzerland, will spontaneously use active modes to move around. There are a number of reasons for this: Education about green modes, many dedicated facilities, special services, financial incentives, etc.;
- The work of user associations: Hiking clubs in France, Germany and Poland, national cycling federations, etc. Direction signs have often been entrusted or given over to user associations which have actively taken it on. They have created charters and guides and they ask for and propose regulations;
- Non-centralized expertise: The Swiss “Cantons”, the “Länder” in Austria and Germany and the main regions in Belgium;
- Comprehensive national signs for all walking and cycling networks: Denmark and Switzerland, for example;
- In some countries, there is no specific regulatory framework;
- Local political will, national green mode development schemes: Having adopted national schemes, including major national and international routes (long-distance footpaths in France or the Ravel in Wallonia), set up national or federal master plans to support them, some States have developed regulations either from that applied to road traffic or by creating special regulations; Tourism demand: The development of pedestrian and cycle routes is closely related to tourism demand. Many routes are the result of previous widely used practices, such as the Way of St James, the Loire route or the Danube by bike. Green modes are often combined in strategies to promote tourism under the "environmental" heading. The strong tourism demand related to hiking has prompted mountainous countries like Austria, France and Switzerland to develop a significant number of routes and services for pedestrians, while the countries with a more flat lands have focused their efforts more on cycle routes.

5. Implementation

Whether political organizations are centralized or federal, the role of the central government is to prescribe and plan national policy in favour of active modes with financial contributions to these projects.

It delegates the carrying-out of such projects to local authorities such as the Regions in Spain, the "Cantons" in Switzerland, the "Länder" in Austria and Germany or the "Départements" and, intercommunal authorities and towns in France and Poland.

Management and maintenance are often left to local authorities or even associations.

Thus, the extent of this delegated authority is different. It is usually based on the respective levels of funding for each entity involved.

In Germany, the "Länder" have almost total authority to act in planning, implementation and funding.

It must therefore be concluded that there are as many procedures as there are countries.

6. The major trends

The present study of 13 countries shows that the orientation, direction signs and signals and information systems are more or less heterogeneous according to the type of route.

The major cross-border walking and cycling routes are already relatively homogeneous, as regards both the types of signs and the information provided to users.

They form large networks that have their own charters. But the more the routes become local, the greater the temptation to customize signs and considerable heterogeneity is observed. But this is most of time not detrimental to the quality of the messages provided.

Countries do not all have the same degree of completeness and accuracy in their regulations. Those who have adopted national schemes for the development of cycle and pedestrian route networks are ahead and have generally already developed specific regulations. It can be observed that these regulations often draw heavily on neighbouring countries or which have the same culture.

The main similarities are as follows:

- **All countries have at least the highway code as the basic regulation;**
- **Similar network hierarchies exist from national and international main routes complemented by regional and local loops;**
- **The use of identical colours: Yellow for marking pedestrian routes in Alpine countries, red for the cycle network in Switzerland, Italy and Bavaria, green in France, Austria, Belgium and Saarland, blue in England and Denmark;**
- **Way marking using simple marks for the long-distance footpath network in France, marks imported and adapted in Austria;**
- **The use of identical cycle and pedestrian logos;**
- **In urban areas, cycling networks designed as alternatives to the car; still few marked pedestrian networks;**
- **In rural areas, tourism is what drives the development of routes.**

The demand for homogenization on major routes is greater than on local networks where users are mainly serious travellers using modern tools, such as websites for travel planning or satellite guidance for location and guidance.

This homogeneous signage makes research and travel easier for them.

On local loops, customized signs are not always perceived as a disadvantage because the user adapts to them easily. It may even be an asset for better identification of the route.

Whether for major routes or local loops, the common demand is for quality and consistent messages: Adequate, continuous way-marking, clear indications at the main points, reliable distances and times, information on local services and good equipment maintenance.

7. Some ideas to remember

This study shows how effective the Vienna Convention has been in defining common signs and signals that can be understood by all inhabitants of Europe.

The work done by the UNECE Working Party on Road Traffic Safety (WP.1) on establishing signs for the EuroVelo routes, with the choice of a common identifier, shows the value of harmonization.

However, this study also shows that currently the signs and signals included in the convention are not addressing emerging needs related to the development of active modes of transport. Given the success of the existing signs, it may seem desirable to complete the signs and signals for active modes (walking and cycling) in a international recommendation, resolution or even in an international convention or agreement.

The section on regulatory signs identifies principles for signs and signals that could be incorporated therein.

This study also shows that **the authorities of a country can stimulate the development of active travel modes (walking and cycling) either as stand-alone or as complementary modes to other transport modes**.

guarantors of national regulations, they are in a position to give a signal and legally allow communities or associations, depending on the culture and tradition of each country, to act by implementing rules favourable to the development of walking and cycling that apply to movement within, and management of, public space.

This might involve creating a **toolbox** that can also be used to educate residents by keeping a certain amount of homogeneity and developing the economic activity which may be generated by tourism:

- **for regulatory signs and signals, by creating new rules in the highway code of each country, by transcribing items from the Vienna Convention and drawing on practices found in other countries and, finally, by creating adequate signs and signals corresponding to these rules.**
- **for direction signs as regulations or as recommendations by combining three types of informational systems: direction signs, way-finding marks and plans.**

Finally, at international level, this study shows that countries are not lacking in imagination to respond to newly emerging needs.

It may be a source of inspiration to promote signs and signals that would use symbols that can be understood by all, even by those who cannot read or who do not speak the language of the country.

As such, it calls for further work on the exchange of good practices on the subject of pedestrians and cyclists as shown and practised in the framework of THE PEP.

8. Annexes on CD-ROM: factsheets by country

The sources used to compile the factsheets and to prepare this document are listed by country at the end of each factsheet. Our appreciation goes to the contacts in each country for the information they have given to us.

The factsheets for Belgium, Denmark, France, Germany, Norway and Switzerland and have been validated by the authorities of these countries.

- 01-Austria: Pedestrians
- 02-Austria: Cyclists
- 03-Belgium: Pedestrians
- 04-Belgium: Cyclists
- 05-Denmark: Pedestrians
- 06-Denmark: Cyclists
- 07-France: Pedestrians
- 08-France: Cyclists
- 09-Germany: Pedestrians
- 10-Germany: Cyclists
- 11-Italy: Pedestrians
- 12-Italy: Cyclists
- 13-Norway: Pedestrians
- 14-Norway: Cyclists
- 15-Poland: Pedestrians
- 16-Poland: Cyclists
- 17-Russia: Pedestrians
- 18-Russia: Cyclists
- 19-Spain: Pedestrians
- 20-Spain: Cyclists
- 21-Switzerland: Pedestrians
- 22-Switzerland: Cyclists
- 23-United Kingdom: Pedestrians
- 34-United Kingdom: Cyclists
- 25-USA: Pedestrians
- 26-USA: Cyclists

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La signalisation pour les cyclistes et les piétons

Comparaison des règles et pratiques de signalisation dans 13 pays

Le manque d'activité physique couplé avec l'usage fréquent de véhicules motorisés en zone urbaine a conduit à l'augmentation de la sédentarité. Cette dernière est devenue un réel problème de santé publique. Accroître la part modale de la marche et du vélo contribue non seulement à améliorer notre santé, mais également réduirait la pollution de l'air et le bruit, et pourrait également conduire à un plus grand usage des transports publics.

Afin d'accroître l'attractivité de la marche et du vélo, les infrastructures nécessaires doivent exister. Elles doivent être accessibles et offrir du confort pour chaque utilisateur. Les études montrent que les usagers ont très peu de connaissances du territoire urbain. Souvent, leur vision est celle d'un archipel constitué d'îles connues entourées d'océans inconnus. C'est pourquoi une signalisation facilement reconnaissable et familière, qui donne des directions claires et des indications sur les distances et les temps de parcours, est un outil pour rendre plus attractif la marche et le vélo. Aujourd'hui, il existe une multitude de panneaux et autres signaux, souvent développés localement, qui ne remplissent pas toujours ces critères.

Cette étude menée par le Cerema dans le cadre du plan paneuropéen transport santé environnement (PPE TSE) fournit un inventaire des règles et réglementations ainsi que des bonnes pratiques pour la signalisation piétonne et cycliste dans treize pays. Les informations et les exemples peuvent servir de référence pour les collectivités locales ou les états qui souhaitent développer une telle signalisation. L'étude pourrait également être un point de départ pour l'harmonisation au niveau international de la signalisation pour la marche et le vélo, et constituerait ainsi une contribution à la révision de la convention de Vienne sur la signalisation et la circulation routières (1968) en vu de la promotion des mobilités actives et de faciliter le tourisme lié à la marche et au vélo.

СИСТЕМА ДОРОЖНЫХ ЗНАКОВ для ПЕШЕХОДОВ и ВЕЛОСИПЕДИСТОВ

Сравнение правил и практики сигнализации в 13 странах

Недостаток физической активности в сочетании с частым использованием моторизированных транспортных средств в городской черте привел к распространению малоподвижного образа жизни. Это стало реальной проблемой с точки зрения общественного здравоохранения. Рост доли передвижения пешком и на велосипеде не только способствует улучшению нашего здоровья, но и уменьшает степень загрязнения воздуха и уровень шума, а также может привести к более широкому использованию общественного транспорта.

Для повышения привлекательности ходьбы и езды на велосипеде необходимо наличие соответствующей инфраструктуры. Она должна быть доступной и комфортной для каждого пользователя. Исследования показывают, что люди обладают весьма скромными знаниями о городской территории. Зачастую они представляют ее как архипелаг, состоящий из известных островков в океане неизведанного пространства. Именно поэтому легко узнаваемая и привычная система дорожных знаков, четко указывающих направления, расстояния и время пути — это инструмент, который сделает ходьбу и езду на велосипеде более привлекательными. Сегодня существует множество знаков и других указателей, зачастую установленных на местном уровне, которые не всегда отвечают этим критериям.

Данное исследование, проводимое Cerema в рамках Общеевропейской программы по транспорту, окружающей среде и охране здоровья (ОПТОСОЗ), представляет собой перечень правил и норм с указанием положительного опыта в отношении системы дорожных указателей для пешеходов и велосипедистов в тринадцати странах. Информация и примеры могут служить ориентиром для административно-территориальных образований или государств, желающих разработать систему подобных дорожных знаков. Кроме того, исследование может служить отправной точкой для стандартизации системы дорожных знаков для пешеходов и велосипедистов на международном уровне и, таким образом, способствовать пересмотру Венской конвенции о системе дорожных знаков и дорожном движении (1968 год) в рамках пропаганды активных способов передвижения и пешего и велосипедного туризма.

Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement (Center for Expertise and Engineering on Risks, Urban and Country Planning, Environment and Mobility) created on 1 January 2014 by the merger of 8 CETEs, Certu, Cetmef and Setra.

Cerema is a local public administrative body *(établissement public à caractère administratif - EPA)*, under joint supervision by the French Ministry for Ecology, Sustainable Development and Energy and the Ministry of Territorial Equality and Housing. Its mission is to provide heightened scientific and technical support to develop, implement and evaluate town and country planning and sustainable development policies, with all the bodies involved (government, local authorities, businesses, associations and scientific partners).

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Signs and signals for cyclists and pedestrians

Comparison of rules and pratices in 13 countries

The lack of physical activity coupled with the frequent use of private cars in urban areas has led to an increasing sedentary lifestyle and has become a serious public health concern. Increasing the share of walking and cycling does not only contribute to increased health, but would also reduce noise and air pollution and could lead to an increased use of public transport.

I order to increase the attractiveness of walking and cycling, the necessary infrastructure must be provided that is safe, accessible and comfortable to all users. Studies have shown that users have a very limited knowledge of the urban space and often see cities as an archipelago made up of islands in a sea of unknown spaces. Therefore, easily recognizable and familiar signs and signals that provide clear directions and information on distances and travel times are an indispensably tool to make walking and cycling more attractive. Today there exist a multitude of different signs and signals, mainly developed at the local level, that do not yet always fulfil these criteria.

The present study, prepared by CEREMA in the framework of the Transport, Health and Environment Pan-European Programme (THE PEP), provides an inventory of existing or planned rules and regulations as well as best practices on signs and signals for cyclists and pedestrians in 13 countries. The information and the examples could be referred to by local authorities or States wishing to develop such types of signs and signals. The study could also be the starting point for the harmonization of signs and signals for walking and cycling at the international level and could contribute to the current review of the Vienna Convention on Road Signs and Signals (1968) towards promotion of active mobility and the facilitation of pedestrian and bicycle tourism.

French and russian summary at the end of the work.
Résumé en français et en russe à la fin du document.
Резюме на французском и русском в конце документа.

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