MORE
Multimodal Optimisation of Roadspace in Europe

Comparison of national legislative frameworks for cycle infrastructure number

Annex to D2.3 report

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Introduction

Cycling is traditionally perceived as a local issue, and most of cycle trips are indeed relatively short. However, higher level legislation, in particular national regulations on signs and signals, can significantly affect how easy (or difficult) it is for local (e.g. municipal) authorities to provide coherent, safe, direct, comfortable and attractive cycling infrastructure.

Having proper traffic management tools can help create a good cycle route, while at the same time managing road space more efficiently and avoiding the many conflicts between motorists, cyclists and pedestrians. The MORE project, co-financed by the Horizon2020 program of the European Union, concentrates on urban feeder roads of the TEN-T network. For such roads often a painted cycle lane or even segregated cycle path might not always be the best option available, as in some cases parallel local streets offer potential for a higher quality cycle route: more direct, with less traffic lights, less noise and air pollution, but also with less conflicts with pedestrians around public transport stops. Unfortunately, in many countries legal provisions for allowing contraflow cycling, cycle streets or other cycle-friendly forms of traffic calming on these more local streets are missing, unclear or prohibitively restrictive.

The MORE project aims for efficient use of road space. For cities to achieve this, national legislation has to accommodate a range of multimodal design solutions. Because cycling is a relatively new mode of transport in many countries and has therefore only minimally standardised on the international level, the legislative provisions are often lacking particularly for cycling infrastructure.

The study (annex 9 to the 2.3 report) currently includes an analysis of 11 elements that we consider of particular relevance for the development of cycling infrastructure on urban feeder roads. Legislation of the following 11 states was included:

- Belgium
- Croatia
- Germany
- Hungary
- Italy
- Luxembourg
- Poland
- Portugal
- Slovenia
- Spain
- UK

Further information about legislation regarding cycling traffic and cycling infrastructure in Denmark and the Netherlands can be seen in the ECF's Safer Cycling Advocate Program

Best Practice Guide.[1] A brief introduction to French regulations is available in "The carrot versus the stick. Over 30 years of evolution of French bike regulations" by Olivier Schneider.[2]

The analysed solutions include:

- Cycle tracks
- Cycle lanes
- Cycle streets
- Contraflow cycling
- Cycling in bus lanes
- Cycling on the sidewalk
- Advanced stop lines / bike boxes / bike locks
- Right of way on cycle crossings
- Special rules/provisions for left turning for cyclists
- Exemptions from traffic lights for cyclists
- Wayfinding

For each of the listed solutions, we compared the definitions, signage, rules applying to road users (obligations/prohibitions for different groups of users) and to public administrations (conditions for applying the solutions). The comparison does not include design parameters for typical infrastructure (e.g. widths of cycle tracks/lanes etc.), as these have been covered in detail in MORE's deliverable D1.2. Urban Corridor Road Design: Guides, Objectives and Performance Indicators.

The following international legislation is used as a point of reference:

- Vienna Convention on Road Traffic[3]
- Vienna Convention on Road Signs and Signals[4].

The findings reported in this deliverable reflect the state of knowledge up to their first submission date. We acknowledge that several important EU Member States are still missing from the picture, therefore the findings should be treated as preliminary, subject to revision when more national legislations are added to the comparison. For selected solutions, information about countries with yet incomplete fiches (Austria, Denmark, France, Norway, the Netherlands, Romania and Switzerland) are available on demand. A revised version will

1 https://safercycling.roadsafetyngos.org/best-practice-guide/

2 https://ecf.com/sites/ecf.com/files/Schneider.O_French_Regulations.pdf

3 Consolidated version: https://www.unece.org/fileadmin/DAM/trans/conventn/Conv_road_traffic_EN.pdf

4 Text: http://www.unece.org/fileadmin/DAM/trans/conventn/signalse.pdf; consolidated version including diagrams: http://www.unece.org/fileadmin/DAM/trans/conventn/Conv_road_signs_2006v_EN.pdf

be submitted in August 2021 that will include more recent material, including one sheet per country, references to source documents and a full list of contributors.

Cycle tracks

A "cycle track" is defined in the Vienna convention on road traffic as an independent road or part of a road designated for cycles, signposted as such. A cycle track is separated from other roads or other parts of the same road by structural means. Minor variations in national definitions include, for example, the possibility to separate not only by structure itself, but also by road safety equipment (so called “light separation”) or sufficient space (e.g. 75 cm buffer space in Hungary).

Cycle track sign D, 4 in the Vienna Convention on Road Signs and Signals.

Non-compulsory cycle track sign in Luxembourg (not defined in the Vienna Convention on Road Signs and Signals). Similar signs are in use in Austria, Belgium, Denmark, France.

- Compulsory cycle tracks in all the analysed countries (and non-compulsory in the UK) are signed with Type A mandatory signs (D, 4 in the Vienna Convention on Road Signs and Signals).
- Most countries have provisions for combining cycle and pedestrian tracks, and common signs to designate such combined tracks.
- Many countries distinguish compulsory and non-compulsory cycle tracks. Provisions for non-compulsory cycle paths are missing in countries with lower levels of cycling (Croatia, Italy, Poland, Slovenia, Spain).
- Most countries (France, Belgium, Luxembourg, Austria, Denmark) that provide non-compulsory cycle tracks, designate them with signs similar to mandatory ones, but square instead of round (not defined in the Vienna Convention on Road Signs and Signals, but in line with its logic). Germany, Hungary and the Netherlands developed their own signs for non-compulsory cycle tracks.

Both compulsory and advisory cycle tracks possible	Only compulsory cycle tracks	Only advisory cycle tracks
Austria, Belgium, Denmark, France, Germany, Luxembourg, the Netherlands	Croatia, Hungary,[5] Italy,[6] Poland, Slovenia, Spain	Portugal (?)[7], UK, Norway

Cycle lanes

According to the Vienna Convention on Road Signs and Signals, a "cycle lane" means a part of a carriageway designated for cycles. A cycle lane is distinguished from the rest of the carriageway by longitudinal road markings.

- Most countries distinguish between compulsory and advisory cycle lanes.
- Most countries sign cycle lanes with signs by the side of the road, in addition to horizontal markings. These signs are not standardised across Europe: some countries use the same signs for cycle lanes as for cycle tracks (e.g. Belgium, Luxembourg), some extend the signs designating lanes for other vehicles (e.g. Poland, Hungary, Spain), some have special signs for cycle lanes only (e.g. UK).
- Several countries restrict the use of cycle lanes to built-up areas (Germany, Hungary, Poland), under the assumption that the solution is not suitable when the speed of motorised traffic is high (speed limits outside built-up areas are 100 km/h in Germany, 90 km/h in Hungary and Poland). However, this approach does not take into account the possibility to apply lower speed limits on lower class roads outside built-up areas, either as a general rule (70 km/h in Flanders, Belgium) or on roads signed as such (60 km/h in the Netherlands).
- (only?) UK contains provisions for cycle lanes operating at certain hours or days of the week8.

[5] Cycle tracks are compulsory unless there are sharrows on the carriageway. NB: A sharrow is a bicycle pictogram with arrows (chevrons), used on a carriageway to indicate recommended position of bicycles and/or alert other users to the possibility of presence of cyclists.

[6] Cyclists are not obliged to use combined pedestrian and cycle tracks.

[7] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

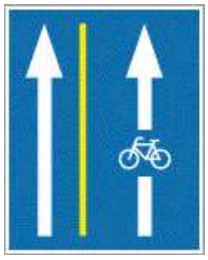
[8] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

- Italian Road Code (?)9 requires all new roads of category C, D, E, F (extra-urban secondary, urban fast, urban slow and local streets) to have a cycle lane unless it is impossible for safety reasons (must be in line with multi-year local plans). The road authority must also ensure temporary cycling lanes in case of extraordinary maintenance of the road (if no safety problems and in line with multi-year local plans).[10]

Examples of different roadside signs denoting cycle lanes:

Belgium, Luxembourg (compulsory cycle lanes only)

Poland, Spain



Hungary

UK

Cycle streets

Cycle streets are streets where (selected) other vehicles are permitted but cycling is somehow prioritised. As a relatively new concept, not included in the Vienna convention on road traffic, the diversity in how the solution is defined, applied and used is significantly higher for cycle streets than cycle tracks or cycle lanes.

The table below summarises several identified approaches. The commonly (but not always) repeating elements are speed limit of 30 km/h, prohibition to overtake cyclists, permission to cycle 2 or more abreast.

	Germany	The Netherlands	Belgium	Luxembourg	France, Spain, Switzerland	Croatia, Italy, Poland, Portugal,

[9] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

[10] These sound like very strong requirements, but according to FIAB in practice the road administration often ignores by simply saying it is not in line with their multi-year plan.

						Slovenia, UK
Sign	244.1 	L1002 	F111 	E,18a 	Experiments in progress, no settled signs and/or rules yet	No provisions for cycle streets
Speed limit	30 km/h	Set by a separate sign	30 km/h	30 km/h		
Other vehicles allowed?	Only if explicitly listed under the sign	Yes	Yes	Only local residents		
Overtaking cyclists allowed?	Yes	Yes	No	No		
Other rules for road users	Riding two abreast allowed (on other streets – only if it does not hinder traffic)	-	Cyclists can use full width of the street	Cyclists can use full width of the street; parking only allowed on dedicated places		
Conditions for applying the solution	Only to be used if cycling is (or is expected to be) the dominant form of traffic in the street		-	?[11]		

More than a half of the analysed Member States did not have legal provisions for cycle streets. This in itself might not be a critical issue, as the solution is meant for streets where cycling is a dominant form of traffic, and in beginning countries this will be a relatively rare situation. If there are no specific provisions for cycle streets, municipalities can usually still use tools like filtered permeability to reduce the volume of motorised traffic, calm the traffic and create a substitute of a cycle street.

[11] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

Across the analysed legislations the most problematic regulations for incorporating local streets in cycle routes were identified in Croatia where:

- articles 51 and 69 of the Road Code oblige slower vehicles to move to the right or pull aside for faster traffic if a queue is formed behind them, or if roadway is not wide enough or other conditions prevent safe overtaking;[12] [13]
- "under normal circumstances" municipalities cannot apply a speed limit lower than 40 km/h.

This means that even on local streets cyclists are not treated as equal road users and the motorised traffic cannot be slowed down to speeds safe for mixing with cyclists.

Contraflow cycling

Contraflow cycling allows a street that is one-way for cars to be used for cycling in both directions. The idea stems from the observations that:

- a street might be too narrow for two cars to pass each other, but still wide enough for a car and a bicycle;
- one-way streets often serve to filter out through-traffic from residential areas to protect local streets from motorised through traffic, but of course would not be necessary for cyclists since cycling does not generate noise, pollution or substantial safety hazard for inhabitants.

No Member State gives a blanket permission for cyclists to cycle against the flow of motorised traffic, plates with exception need to be added under the one-way signs.

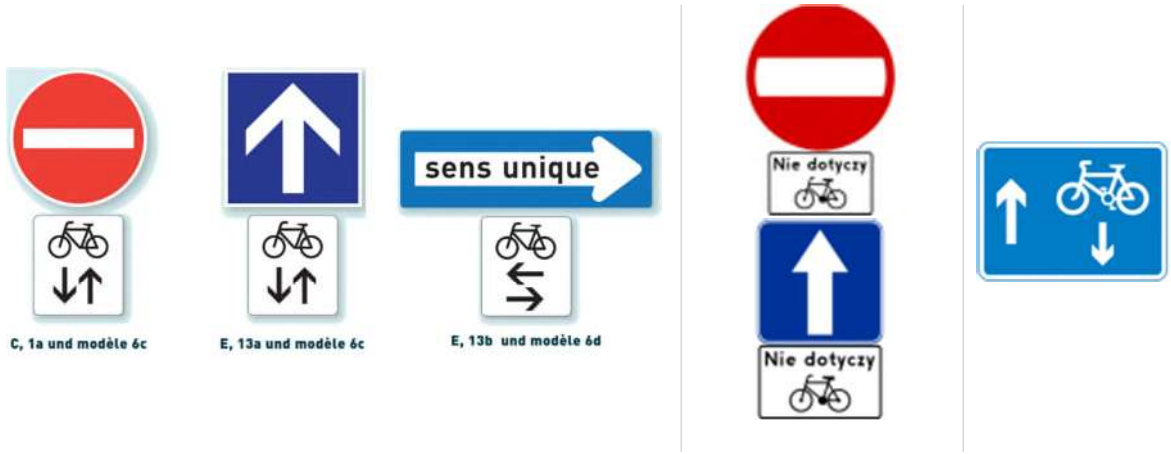
- In most countries the administrative regulations allow to add an exception for cyclists under one-way signs without any dedicated infrastructure if the traffic speed is limited to 30 km/h.

Example signs for contraflow cycling:

Luxembourg	Poland	UK

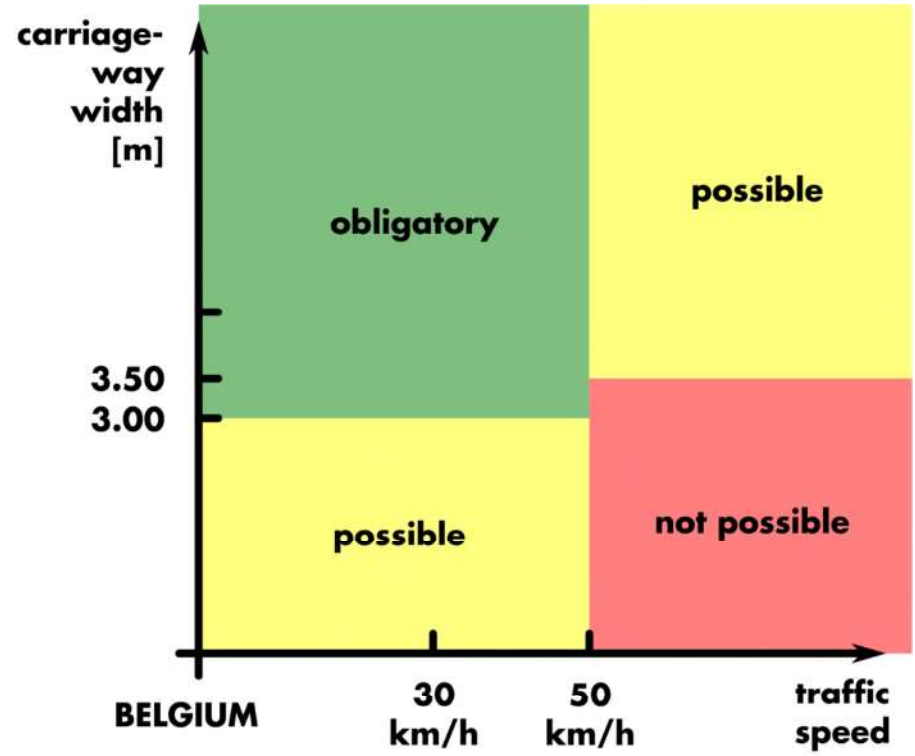
[12] Similar regulation existed in Poland until it was repealed in 2011 as a part of cycling friendly revision of the highway code: https://www.eltis.org/discover/news/civil-society-triggers-cycling-friendly-changes-polish-highway-code-0; http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20110920530

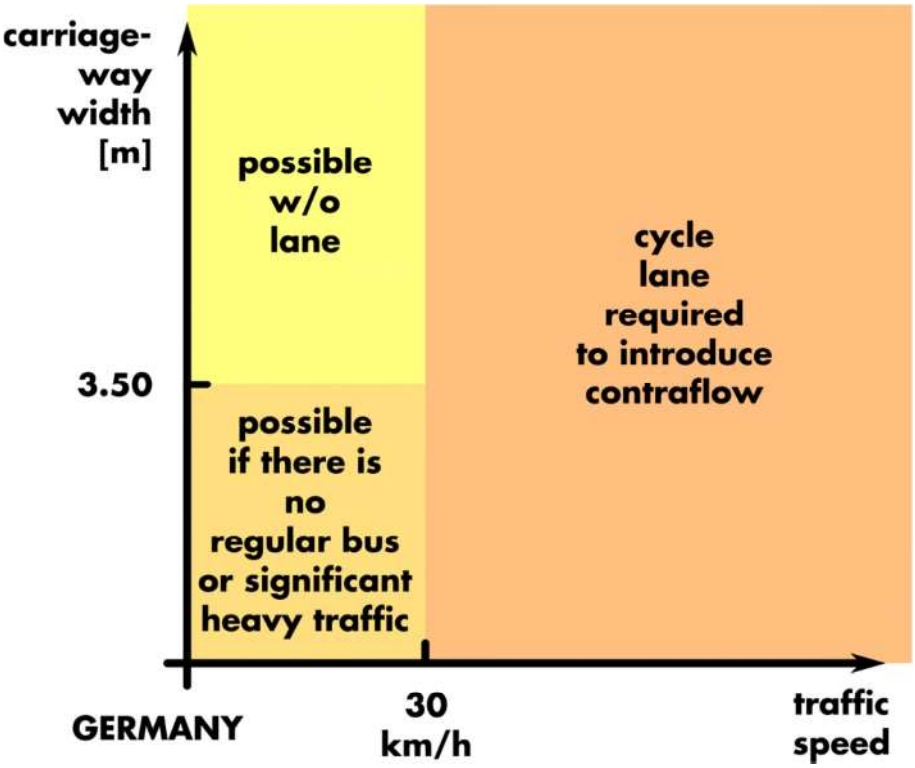
[13] UK prohibits drivers of slow-moving vehicles from holding up a long queue of traffic, but it seems to be interpreted not as strictly as in Croatia.

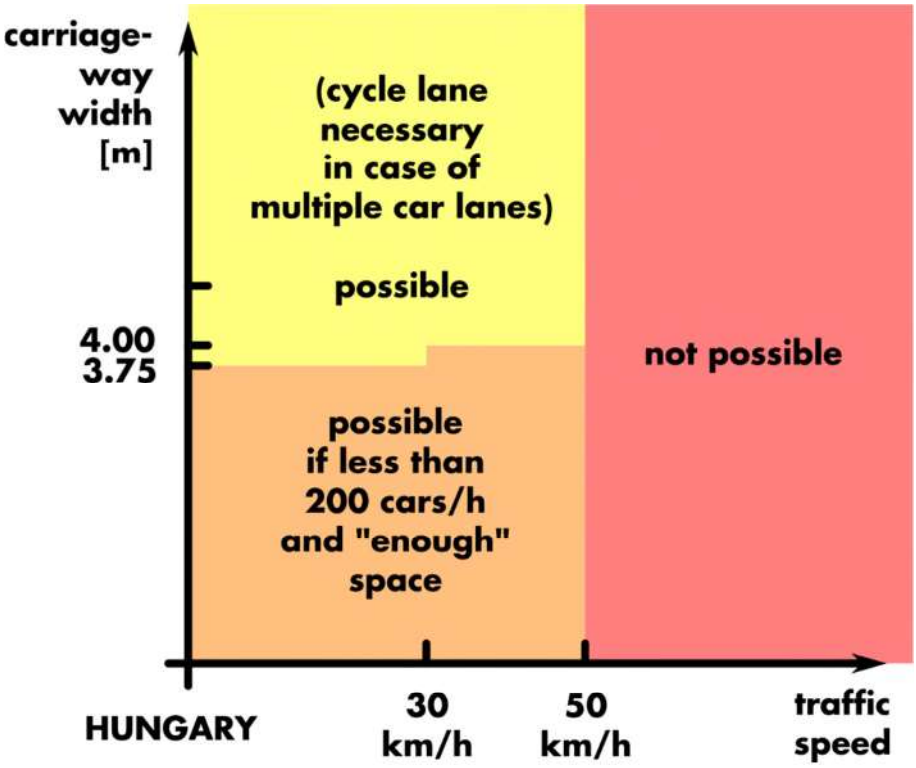


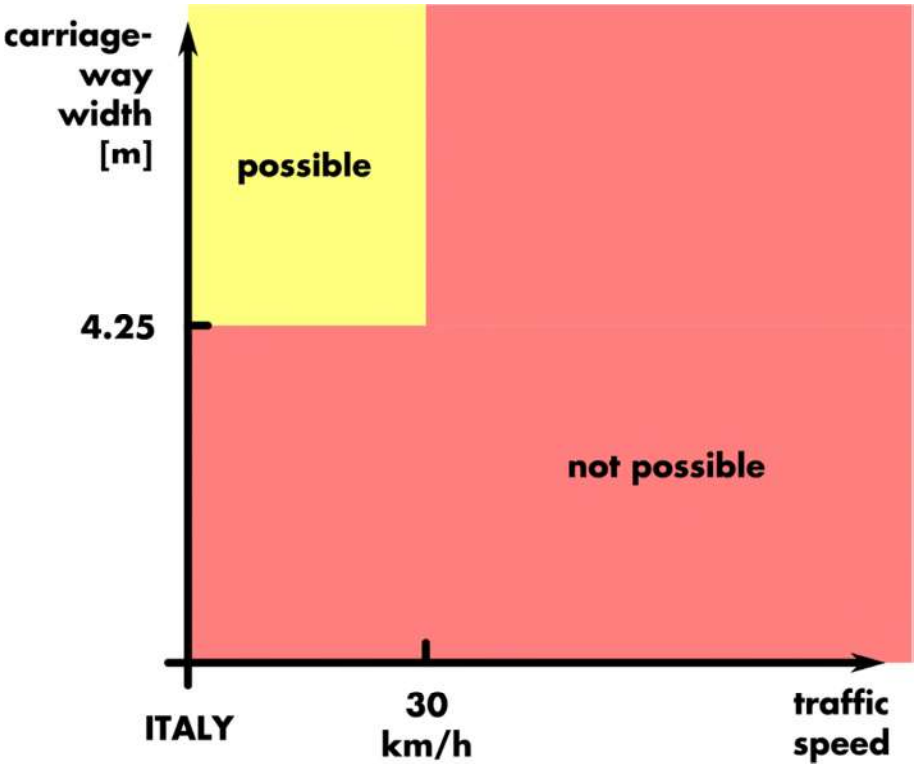
- Additional conditions, encountered in some of the countries, include:
    - specific minimum width of the carriageway: the lowest requirement is set in Belgium (2.60 m) and the highest in Italy (4.25 m);
    - specific maximum volume of motorised traffic, for example 300 cars/h in Luxembourg or 200 cars/h in some cases in Hungary;
    - sight distance, for example in Hungary the road users need to be able to see the other vehicle approaching from the opposite direction from at least 70 m (50 m if the speed is limited to 30 km/h);
    - number of lanes;
    - share of heavy traffic;
    - presence of regular bus lines;
    - gradient.
- Several countries still do not have legal provisions for adding such exceptions (Croatia, Portugal, Slovenia, Spain).
- **Best practice:** Belgian regulations do not only allow, but in many cases oblige the road administration to add exception for cyclists, unless there is a justified reason not to. Only in rare cases when a street with a speed limit above 50 km/h and carriageway width below 3.5 m is contraflow cycling not possible.

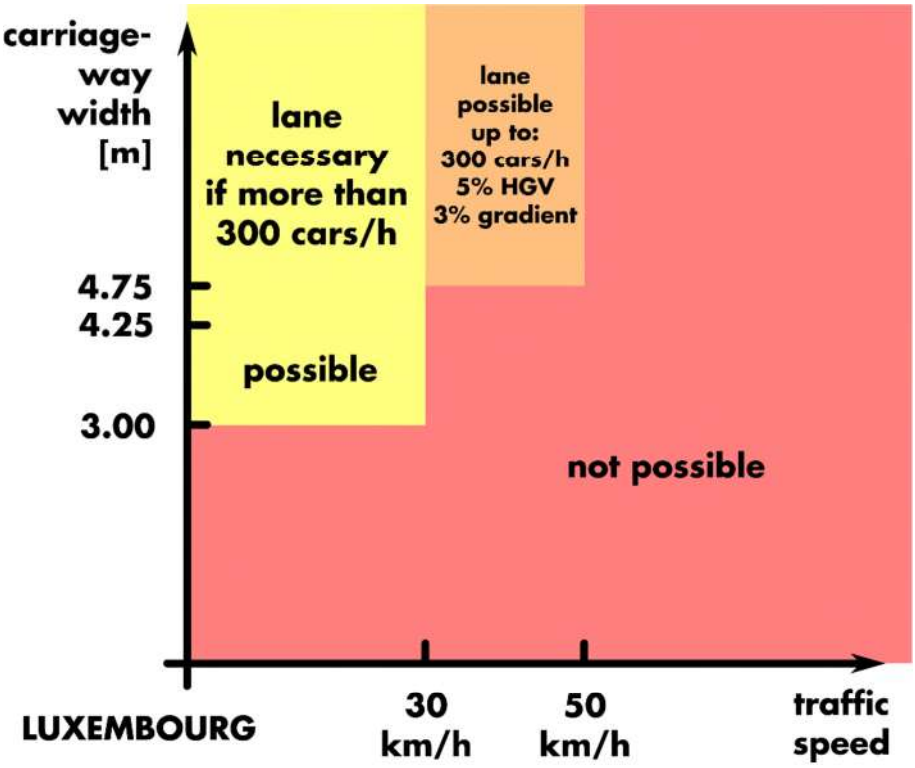
The following graphs present the conditions for introducing contraflow cycling in different countries, either with or without a cycle lane. The graphs focus on carriageway width and speed limit, with other legal conditions included in a simplified manner.

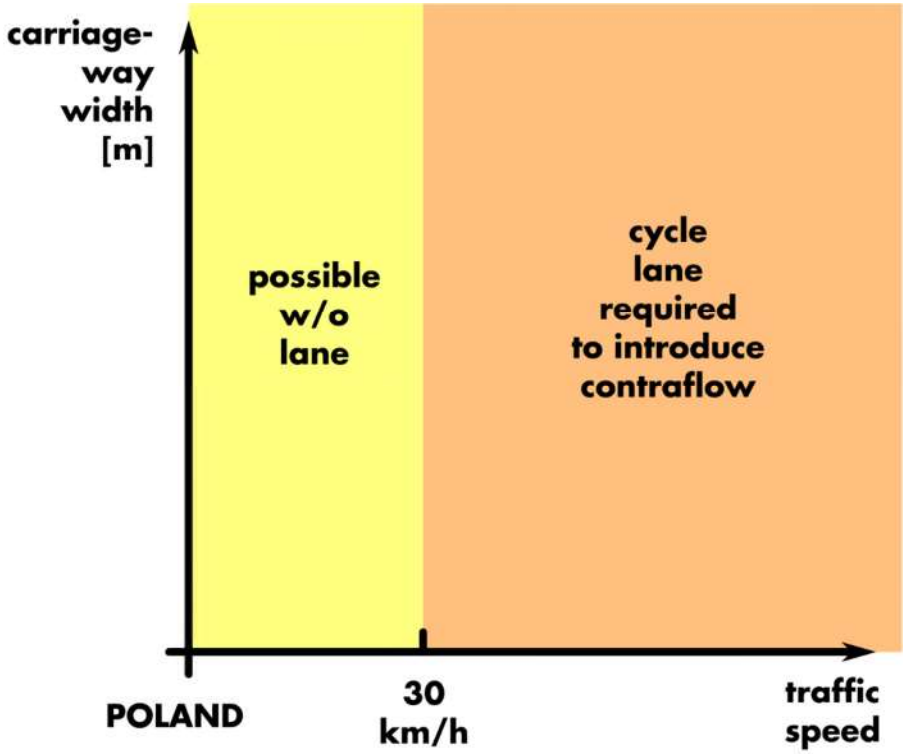








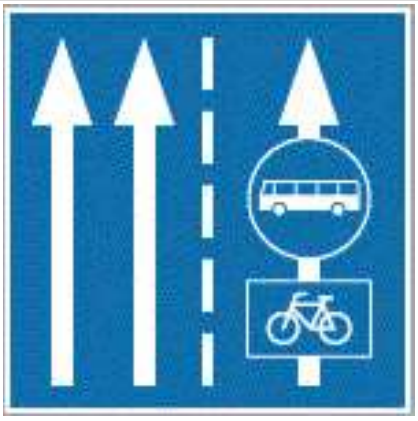




Cycling in bus lanes

None of the analysed legislations gives a blanket permission for cyclists to use the bus lanes, but nearly all of them make it possible to add symbols or exceptions for cyclists to bus lane signs. How often the solution is applied varies from country to country.

Example signs for common bus and cycle lanes

Hungary	Spain	UK
		

- **Best practice:** German administrative regulations address the critical cycling safety issue related to bus lanes, by making it obligatory to include an exception for cyclists if there is no dedicated cycle track or lane and the lack of exception would oblige cyclists to ride between the busses and private cars (VwV-StVO zu Zeichen 245 II.4.)

- Luxembourg also presents a very pragmatic approach, noting that:
    - In locations where there is no separate cycling infrastructure, not allowing cyclists to use the bus lane can create particularly dangerous situations;
    - bus lanes are usually used by fast and experienced cyclists, travelling at speeds similar to busses.

- Italy allows cycling in the bus lane only if the speed is limited to 30 km/h.

- Legal provisions for letting cyclists use bus lanes seem to be missing in Portugal.

- Theoretically cycling can be allowed in bus lanes in Croatia and Slovenia, but this is not used in practice.

It is worth noting that cycling in bus lanes can be combined with non-compulsory cycle tracks or cycling on the sidewalk, in order to cater both for more and less experienced cyclists.

Cycling on the sidewalk

Several countries permit or even oblige children until certain age to cycle on the sidewalks.[14] The legal age limit for cycling on the sidewalk varies as follows:

Max age	Cycling on sidewalk obligatory	Cycling on sidewalk permitted
Not possible at all	Croatia, UK	
8	Germany	
10	Poland[15]	Belgium, Germany, Portugal
13		Luxembourg[16]
?[17]	Italy, Slovenia, Spain?[18]	

As seen in the table, most common age threshold is set at 10 years old.

Several states allow cycling on the sidewalks also in other situations, e.g.:

- When supervising children allowed to cycle on the sidewalk (Germany, Poland);
- If the speed limit on the carriageway is higher than 50 km/h and the sidewalk is at least 2 m wide (Poland);
- In extreme weather conditions (Poland);
- If the carriageway is unfit for cycling traffic (Hungary);[19]
- If cycling on the carriageway is prohibited (Hungary).

[14] On the other hand, Romanian legislation seem to effectively ban children under 14 years old from cycling on any part of public road, both on the carriageway and on the sidewalk: https://ecf.com/sites/ecf.com/files/Cleja.R.and_.Mititean.R_Conflicting_traffic_legislation_for_cyclists_in_Europe.pdf

[15] In Poland children up to 10 years old are considered pedestrians also when cycling.

[16] In Luxembourg children under the age of 13 can play on the sidewalks and children's bikes are considered toys.

[17] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

[18] Ibid.

[19] In practice this covers e.g. permission to cycle on the sidewalk for children.

Austria, Germany and Switzerland allow to authorize cycling on the sidewalk by placing an exception for cyclists under the sign for a pedestrian track. Similar functionality (rights and obligations of road users) is offered by:

- Combined pedestrian and cycle track signs in Italy;
- Non-compulsory cycle/pedestrian and cycle tracks in Belgium, France and Luxembourg.

In all cases, adult cyclists riding on the sidewalks need to give way to pedestrians.

German combination of signs authorizing cycling on the sidewalk. Similar signs exist in Austria and Switzerland.

The regulations can be seen as:

- recognition that the dedicated cycling infrastructure is not (yet) complete and currently of imperfect quality, therefore provisional solutions are sometimes necessary;
- recognition that cyclists are a varied group of road users, and sometimes the same infrastructure cannot address the needs of the whole spectrum (e.g. both children and experienced road cyclists).

Advanced stop lines / bike boxes / bike locks

Many legislations contain provisions for marking an area on an entry arm of a junction that either makes it easier for a cyclist to perform a turn manoeuvre or makes the cyclist more visible to drivers. Provisions for these solutions seem to be missing in Portugal and Spain. Some municipalities experiment with marking them anyway, but it has no legal consequences.

Advanced stop line sign in Belgium

The variety of solutions falling into this category and their signage would require more in-depth and focused analysis. As a starting point, the systematics provided by German administrative regulations can be used, distinguishing:

- advanced stop lines;
- left-turn lanes and "pockets";
- bicycle locks (with separate traffic lights to enter the lock).

Right of way on cycle crossings

While cycle tracks can provide safety by physical separation in between the crossings, cyclists still need to interact with motor vehicles on crossings. Clear regulations for right of way on cycle crossings are critical for the development of dedicated cycle infrastructure. In particular if cyclists have right of way when cycling on the carriageway, but loose it after a parallel cycle track is built, it leads to questioning the sense of construction of cycling infrastructure.

In most frameworks and their practical applications, the right of way on cycle crossings follows the same logic as the right of way for cars:

1. the cycle track along a primary road has right of way over entry arms of minor roads;
2. cyclists going straight have right of way over cars changing direction (e.g. turning left or right from a primary road onto a minor road).

The second principle is to a large degree unified across Europe by the Vienna Convention on Road Traffic, article 16.2:

- Original text:[20]

[20] https://www.unece.org/fileadmin/DAM/trans/conventn/crt1968e.pdf

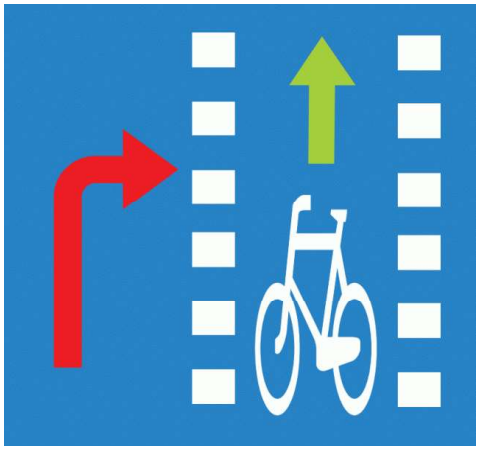
"While changing direction, the driver shall, without prejudice to the provisions of Article 21 of this Convention regarding pedestrians, allow oncoming vehicles on the carriageway he is preparing to leave, and cycles and mopeds moving on cycle tracks crossing the carriageway he is about to enter, to pass."

- Amendments to this entered into force on 28 March 2006:[21]

"While changing direction, the driver shall, without prejudice to the provisions of Article 21 of this Convention regarding pedestrians, **allow road users to pass on the carriageway, or on other parts of the same road he is preparing to leave."**

The change does not affect cycle crossings *per se*, but generalises the principle of priority for road users going straight over road users changing directions from oncoming vehicles and cycle on separate tracks to all possible cases (e.g. also vehicles moving in the same direction on bus or cycle lanes located to the right in case of turning right).

Netherlands: Although the sign has no legal consequences on its own, it serves as an explanation of the principle that turning car should give way to a bicycle going straight. Similar signs were put in a few places in Poland after the national law was harmonized with the Vienna Convention on the Road Traffic.



Several interesting deviations or additions to the basic principles include:

- Germany specifies a concrete distance of 5 m until which the cycle crossing is a part of the junction and the general rules apply; if the crossing is further away, separate signs need to be installed to clarify right of way.
- Rules of road traffic in Spain require motor vehicles to give way to cyclists riding through designated cycle crossings, but the only example provided in the administrative regulations shows a cycle crossing with a yield sign for cyclists.

[21] https://www.unece.org/fileadmin/DAM/trans/conventn/Conv_road_traffic_EN.pdf

- In Croatia and Slovenia there is an ongoing debate on the legal relevance of cycle crossings as some national institutions are of the opinion that even when using a clearly marked cycle crossing over a road, cyclists should yield to other road traffic.
- Hungary requires cyclists to stop and yield to cars if the cycle crossing is in between intersections.
- In Belgium different types of cycle crossings exist, with and without priority for cyclists, denoted by different horizontal markings. Interestingly, a double line of squares denotes cycle crossings with no priority for cyclists, opposite to the meaning of similar signs in many other EU Member States. As the difference is not understood by most of the road users (both cyclists and drivers), crossings without priority are less and less used.
- In the Netherlands priority signs are present on nearly all cycle crossings, in order to keep things simple for road users.

Special rules / provisions for left turning for cyclists

Left turning in right-hand traffic (and vice versa, for countries with left side traffic) is a particularly difficult manoeuvre for cyclists on carriageways. They need to signal the turn (taking a hand off the handlebar), weave through faster moving motorised traffic, watching for cars coming from behind and also the opposite direction, all at the same time as paying attention to road surface. The need for special rules for cyclists on this manoeuvre was already recognised in article 16.1. of the Vienna Convention in 1968 and further elaborated in one of the 2006 amendments (text in **bold**):

> "Article 16.1.
>
> Before turning right or left for the purpose of entering another road or entering a property bordering on the road, a driver shall, without prejudice to the provisions of Article 7, paragraph 1, and of Article 14, of this Convention:
>
> [...]
>
> (b) If he wishes to turn off on the other side, and subject to such other provisions as Contracting Parties or subdivisions thereof may enact for cycles and mopeds **enabling them to change direction, for instance by crossing the intersection in two separate stages,** move as closely as possible to the centreline of the carriageway if it is a two-way carriageway or to the edge opposite to the side appropriate to the direction of traffic if it is a one-way carriageway and, if he wishes to enter another two-way road, make his turn so as to enter the carriageway of such other road on the side appropriate to the direction of traffic."

The manoeuvre can be approached in two ways:

- move as close as possible to the centreline of the carriageway if it is a two-way carriageway, or to the edge opposite to the side appropriate to the direction of traffic if it is a one-way carriageway (“car/direct turn”);
- keep close to the edge appropriate to the direction of traffic in order to cross the intersection in two separate stages (“indirect/hook/two-stage turn”.

“Indirect turn for cyclists” sign in Hungary.

Rules vary significantly between countries:

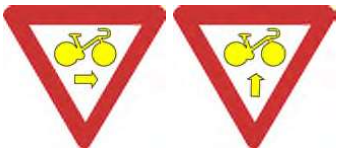
Rules	Countries
Both direct and indirect (hook / two-stage) turn possible on most crossings	Germany
By default, cyclists should turn as cars, but signs might oblige to perform the turn in two stages	Hungary, Luxembourg, Poland, UK (?)
Cyclists always obliged to turn like cars	Croatia, Slovenia, Portugal
Cyclists always obliged to turn like cars, with the exception of interurban roads: if there is no lane specially conditioned for left turns, cyclists are obliged to turn in two stages	Spain
Cyclists are always obliged to turn in two stages	Denmark
Unclear	Belgium, Italy[22]

[22] As of January 31st, 2020, this information still requires additional verification. This will be done by August 2021.

Exemptions from traffic lights for cyclists

In general, traffic lights have traditionally been designed to regulate motor vehicle traffic, either to avoid conflicts between motor vehicles or between motor vehicles and pedestrians. Apart from the few most advanced cycling countries, the majority of traffic lights is not optimised for the flow and safety of cycle traffic, even if dedicated signals for cycle traffic are provided.

Currently, several “climbing” countries are recognising that it might be beneficial to allow cyclists to bypass traffic lights completely. In most cases this is implemented by adding a dedicated sign under the traffic lights, informing in which directions can the cyclist ignore the traffic light. Cyclists crossing on the red light need to yield to perpendicular traffic and pedestrians.

Belgium		Right turn on all crossings; Going straight on T crossings.
Denmark		Right turn only.
France		All directions and combinations possible.
Germany		Right turn only; Only test applications up until now, scheduled for wider use in the next update of the legislation.
Hungary		Currently under discussion.
Luxembourg		Right turn or straight only, requires dedicated traffic light.

Netherlands		Can be a plate or an extra traffic light.

In some cases, the exceptions are added to prioritise cycling, but in many it simply represents a compromise between having traffic lights not suited to cycling and an expensive complete junction reconstruction.

Conclusions

- There are several elements of cycle infrastructure that seems to be rather unified across different Member States – these are the elements defined in the Vienna Convention on Road Traffic (in particular cycle tracks, to a lesser extend cycle lanes and rules of priority on cycle crossings). However, in the 50 years since the adoption of the conventions, new forms of cycle infrastructure have been developed, and for these forms there seems to be some similarities, stemming from a common idea, but the legal regulations vary significantly. For example, road users need to follow a different set of rules on cycle streets in each of the analysed countries. Is it realistic in the current conditions of high international mobility to expect road users to learn and apply the different rules?

- Many countries distinguish between cycle infrastructure/solutions that are compulsory and those that are non-compulsory for cyclists to use. The approach recognises the diversity of cycle users, with different speeds, skill levels and psychophysiological capabilities – e.g. kids still learning to ride, parents travelling with kids, road cyclists, elderly on pedelecs – each of these groups has slightly different needs. Interestingly, it is more often in the legislation of the advanced cycling countries that we find reference to the non-compulsory cycle infrastructure. The countries with lowest levels of cycling and least practical experience seem to believe that wherever there is some form of cycle infrastructure, all types of cyclists should be obliged to use it.

- Several countries are still missing the legislative provisions necessary for optimum use of road space, such as for example contraflow cycling. All of them are countries with low level of cycling, which stays low because of a vicious circle: the types of cycle infrastructure that are allowed by the national legislation require significant financial investments and a lot of space to be taken from other road users, while the existing low number of cyclists does not warrant political will necessary to make such change. On the other hand, countries that improved their legislative framework to accommodate space- and cost-efficient solutions, allowed cities to quickly improve conditions for cycling, which

lead to increase in number of cyclists, and in turn – political will to invest also in “heavier” types of cycling infrastructure.[23]

- The most difficult legislative situation seems to be in Croatia: on one side, the regulations for overtaking discriminate cyclists in mixed traffic and; on the other, a lack of clear priority rules on cycle crossings leads to questioning the sense of providing separated cycling infrastructure.

- Out of the 11 analysed countries, 3 (Germany, Hungary, Italy) are currently in the process of updating their road codes and/or regulations for signs and signals, with regards to cycling infrastructure. Several others either updated their regulations recently or are considering changes basing on pilot projects undertaken by cities or examples from neighbouring countries. Legislative framework for cycling infrastructure is a “hot topic” across the EU and there seems to be lot to gain from an EU level co-operation in this area, to share research, experiences, best practices and avoid reinventing the wheel.

Further research

- Given ECF’s limited time allocation within WP2, a thorough analysis of all relevant legislations has not been possible. The selected countries constitute a sample that illustrates a variety of legislative frameworks across the EU and allows us to draw some preliminary conclusions about their impact on cycling infrastructure, but ECF recommends extending the analysis to all the EU Member States, as well as selected other countries (e.g. Norway, Switzerland and recognised candidates for future membership of the EU).

- An interesting avenue for further research on the subject of cycling legislation in Europe from a comparative perspective could include an in-depth feature on the discrepancies between the rules and guidelines established through national law, and those competences that are delegated to local and regional authorities. The present overview has found that amongst national systems, significant differences in perspective exist between the general laws and guidelines established at the national level and those which are developed at the regional and especially city and municipal level. This may be due to a lack of insight from national legislators as to the “on-the-ground” traffic flow requirements and road conditions that cities and municipalities grapple with on a day-to-day basis. It may also be the case that legislation at the municipal level is better able to adopt new and innovative solutions that may take time to gain recognition through the

23 See e.g. Frederik Depoortere “The role of legislation in Brussels cycling policy”: https://ecf.com/sites/ecf.com/files/Depoortere.F_The_role_of_legislation_in_Brussels_cycling_policy.pdf

hierarchical chain if the legislative process. In any case, further research into the challenges municipal authorities face in adapting road traffic laws and signage to their individual circumstances is warranted.

- Several of the comments received from practitioners consulted indicated that in addition to administrative regulations for signs and signals, barriers for infrastructure development can also be created by how the competences of different authorities are defined. In order to optimise the use of limited road space between different transport modes, governance structures also need to adapt. The optimal cycle routes often need to mix and match streets from different levels of the road administration hierarchy, switch between on- and off-carriageway solutions, sometimes also making shortcuts through parks, along rivers, canal or railroad lines, and users expect consistent standard of infrastructure, wayfinding and maintenance on the whole route.

- In particular, according to Croatian and Slovenian legislations, on certain important roads the carriageway between kerbs, including cycle lanes, is to be developed and maintained by a regional or national road authority, but the pedestrian or cycling tracks along the same road are already in the competence of a municipality. As retrofitting a cycle route along a road often requires changing back and forth from one jurisdiction to another, from on-the-carriageway to a separate road part, this arrangement requires a high level of coordination and mutual permits between road authority bodies and the local municipalities' traffic departments, providing a large additional administrative burden.

- Finally, cycling infrastructure needs a level playing field with roads for cars in terms of land acquisition or environmental procedures. Due to the limited scope of analysis, this was not in its focus, but it seems that while many countries provide a simplified procedure for buying land or acquiring construction permits for new or modernised roads,[24] cycling infrastructure does not enjoy the same privileges. Even in Flanders, which is generally a highly developed cycling region, cycle highways were assigned a status of investments of significant public importance only in 2019.[25] Lack of such provisions leads to suboptimal design choices when municipalities are forced to cater for cyclists in a busy narrow corridor together with car traffic, instead of developing a parallel high quality cycle route.

24 E.g. “Ustawa z dnia 10 kwietnia 2003 r. o szczególnych zasadach przygotowania i realizacji inwestycji w zakresie dróg publicznych” (Parliamentary Act of 10 April 2003 on specific rules for the preparation and implementation of investments in public roads) in Poland, http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20030800721

25 “Minder procedures nodig voor aanleg fietssnelwegen” (Fewer procedures required for constructing bicycle highways), https://www.mobielvlaanderen.be/persberichten/artikel.php?a=1&id=1012

Information about country sheets

The details of each of the analysed countries legislations, including links to relevant legislative acts, are listed in unified form. Insofar as the information provided still requires additional verification, it will be made available by August 2021.

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26 Safer Cycling Advocate Program: https://safercycling.roadsafetyngos.org/

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