

Lessons Learned from Bicycle Traffic Rules in OECD Countries

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1. Objective

The objective of this research is a **comparative assessment of Bicycle Traffic Rules** in OECD Countries. Cycling policies, infrastructure, education and services are examined.

A **questionnaire-based survey** was carried out among experts from countries with sufficient cycling background.

2. Survey

The survey was distributed to experts from **16 OECD countries**, most of them in Europe. The countries were selected on the basis of thorough cycling policies experience as well as cycling acceptability from the public.

The participating countries were **Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Ireland, Israel, Jamaica, Luxembourg, Netherlands, Poland, Slovenia, Switzerland and United Kingdom**, as shown in Figure 1. The survey comprised of questions related to aspects from 8 fields.



Fig. 1: The selected 16 OECD countries responded

3. Results

3.1 Cycling network

Cycling infrastructure requires space availability as well as investment.

Half of the countries **allow cyclists on the road**, but only in **cases of lacking cycling infrastructure**. In 4 countries, cyclists may use public roads without any limitations.

Cycling at shared space areas (Figure 2) is allowed without any limitations in 3 countries, in 9 countries under certain limitations and in 4 countries completely restricted.



Fig. 2: Cycling at shared space areas

Contrary to the sustainable safety approach of Homogeneity, for 10 countries, cycling was found to be allowed on bus lanes if indicated by **traffic signs** (Figure 3).



Fig. 3: Bus lane layout where cycling is allowed

3.2 Shared infrastructure between pedestrians – cyclists

Cycling on sidewalks, especially unconditional, is **forbidden** for almost all the examined countries. This finding was more evident in **North European countries**. For the remaining 9 countries, under certain circumstances, cycling on sidewalks can be allowed. However, for those countries with mixed pedestrian – cycling traffic, **sidewalk width** varies.

3.3 Traffic education

Road safety education **programmes focusing on children** during their primary school instruction exist for 10 of the questioned countries, mostly informational. For less than half of these countries, there is **no formal education** or assessment. Knowledge on traffic rules is not ensured.

3.4 Cyclists age

5 countries adopt the concept of an **adult companion not being compulsory** for children of at least 10 years old, where more than half (9 countries) apply no limitations.

3.5 Speed limits

Cycling **speeds**, especially high values, are **directly linked to risk exposure and injury severity**. Posted cycling speed per road type (regional, local) and per area (urban, rural), has not been determined for all the countries.

Speed limit on cycle lanes has not been defined or is the same with the motorized vehicles for 13 countries. Only 2 countries adopt 30km/h. In cases where specific posted cycling speed on sidewalks and pedestrian roads is adopted, a **speed value equivalent to the walking pace** is usually applied (<10km/h). For shared space areas either no rules apply, or the speed limit is usually set to 20km/h.

3.6 Equipment

Bicycle helmet is considered as the primary safety device. Helmet usage was not a compulsory device for adults over all the examined countries, but mandatory for children in 3 countries. Bicycles equipped with **lights** is a mandatory requirement for all the countries.

3.7 Passengers

Bicycles may **carry passengers** in designated or **specialty adapted seats**. For many countries, additional requirements apply.

3.8 Legislation

Legal contexts differ, among the examined countries. The bicycle is an important and strategic mean of transport, mostly in urban areas.

In almost all examined countries (15 out of 16), and without any exception, **cycling is forbidden on motorways**. Moreover, for these countries the survey revealed that besides pedestrian roads, cycling is also **forbidden on express roads** as well as tunnels – underpasses (7 countries).

4. Conclusions

The assessment of the implementation level on **basic cycling rules by countries with advanced cycling culture**, provides some important insight not only on the cycling acceptability as a transportation priority, but also on the safety considerations raised. The main findings of this survey are summarized through the questions presented in Table 1.

Table 1: Main findings of the questionnaire

	Concerns Raised	Replies		
		Yes	Partially Yes	No
Cycling Network	Cycling allowed on roads	4	12 (no cycling paths, follow rules)	
	Cycling allowed on sidewalks	1	9 (comply to signs, road rules)	6
	Cycling allowed on at shared space areas	3	9 (comply to signs, speed limit)	4
	Cycling allowed on bus lanes	2	10 (comply to signs)	4
Traffic Education	Road safety education programmes for children	6	4 (no formal education - assessment)	6
Cyclists Age	Adult companion compulsory for children below 10years old	5	2 (below 12years old)	9
	Minimum age for children to cycle on roads		8 (>10years old, >12 years old)	8
Speed Limits	Posted cycling speed per road type (regional, local, etc.)			16
	Posted cycling speed per area (urban, rural)		6 (speed limit of adjacent road)	10
	Posted cycling speed on cycle lanes		16 (same as motorized vehicles, <30km/h)	
	Posted cycling speed on sidewalks		6 (<10km/h, <20km/h)	4
	Posted cycling speed on shared space areas		4 (<20km/h)	8
Equipment	Speed limit for e-bikes		2 (<25km/h)	14
	Helmet compulsory		3 (children)	13
	Reflecting clothes compulsory		16 (recommended, rural areas)	
	Lights compulsory	16		
Passengers	Reflecting devices compulsory	14	2 (recommended)	
	Cycling bells compulsory	13		3
Legislation	Passengers in designated seats only	16		
	Cycling allowed on motorways	1		15

Further actions needed:

- redesign of many urban areas, taking into consideration general **traffic calming measures**,
- assessment of shared space areas and **30 km/h zones**,
- **education and enforcement** to familiarize other transport system users with cyclists in terms of safety.