

ELECTRIC SCOOTERS AS AN URBAN SECURITY ISSUE: PUBLIC DISCOURSE ON THE NEW LAW ON TRAFFIC SAFETY*

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How to balance the need to ensure responsiveness in addressing present challenges in the field of traffic safety and urban security challenges, and to do that following the evidence-based policy making? This question appears to be relevant for the policy makers in Serbia, after the extensive use of e-scooters on the streets has become a real issue while remaining unregulated. Their attempts to do that have attracted a great attention of professional and general public. In this paper, authors analysed the public discourse on the draft Law on the traffic safety on the roads, in order to identify the main attitudes of citizens towards the conditions for use of e-scooters. Applying the content analyses of the news on media portals and Twitter posts, authors have also taken the opportunity to compare their 2023 findings with 2019 results of the initial research and to provide for a clear picture not only on the current public discourse on e-scooters, but also to identify the main trends describing how these attitudes are evolving through the time. The authors also identified the need to change the way on how this issue is communicated by the decision makers with the citizens affected by the planned legislative amendments.

KEY WORDS: e-scooter / trottinette / light electric vehicle (LEV) / urban security / traffic safety

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1. AN EXTENSIVE USE AND LEGAL REGIME OF E-SCOOTERS' USE

Increased development of various light electric vehicles, increased costs of fuel due to the global economic and security crisis, the challenges of COVID 19 pandemic, but also a need to ensure an easy mobility in urban areas and reduce the air pollution, have resulted, among others, in extensive use of those vehicles, especially e-scooters across the World. (Kolaković-Bojović & Paraušić, 2019)

This trend has also comprehensively affected Western Balkans Region, where decision makers have attempted to do both- further support the use of these, alternative means of transportation in urban areas, but also to develop a legal regime applicable to them in order to avoid security risks and legal uncertainties towards their use.

1.1. E-Scooters in comparative legislation

With above mentioned in mind, in Croatia, during 2022, amended its Law on Road Traffic Safety¹, which defines electric scooters in the same way as the Draft Law on Road Traffic Safety in Serbia (hereinafter: DLRTS), except the drivers of electric scooters have almost identical rights and obligations as cyclists. The only difference is that drivers of light electric vehicles (e-scooters being one of them) must always wear a helmet, while cyclists only have this obligation if they are younger than 16.

In Slovenia regulation of the use of electric scooters was developed through legislative amendments in July 2021. In that country, drivers of e-scooters are prohibited to drive on the sidewalks; they can use bicycle lanes and roads with a speed limit of up to 50 kilometres per hour. Underage drivers must wear helmets. (Danas, 2023)

In Montenegro the use of electric scooters has not yet been regulated, although the Montenegrin Police Administration has asked the Ministry of Interior to form a working group for amendments to the Law on Road Traffic Safety. Despite the fact that the law does not recognize these light electric vehicles, the Montenegrin capital launched the campaign "Podgorica on two wheels", which subsidizes the purchase of e-scooters and other green alternatives of transportation. (Danas, 2023)

In Skopje, the capital of North Macedonia, actions were also taken to introduce these vehicles into public transportation, since the Minister of Foreign Affairs, Bujar Osmani, announced in July 2021 that employees of that ministry would use this form of transportation to get to and from work. Such practice of public officials is "an example of responsible behaviour towards the environment protection and the reduction of pollution", he stated. (N1, 2021)

¹ Law on Road Traffic safety, Official Gazette, 67/08, 48/10, 74/11, 80/13, 158/13, 92/14, 64/15, 108/17, 70/19, 42/20, 85/22, 114/22

In the Republika Srpska, an entity of Bosnia and Herzegovina, a regulation was adopted in April 2021 that stipulates that electric scooter drivers must wear a helmet, be older than 14 years, and also have a certificate of knowledge of traffic regulations.² However, due to the complex constitutional organisation of the State, the rules in Bosnia and Herzegovina are not the same in all parts of the country. In the Canton of Sarajevo, e-scooter drivers have been banned from driving on the sidewalks with fines ranging from 50 to 250 convertible marks. (Danas, 2023) In that canton, the driving of light electric vehicles is allowed on bicycle lanes, as well as on the roads. Such legal regimes are especially interesting, since despite their differences, it is sometimes difficult to implement them in practice because a switch from one to the other legal regime may occur in the same street.

1.2. E-Scooters in Serbian legislation

After a several years of an intensive debate among experts and professionals³, the working group established by the Ministry of Interior has developed the draft amendments to the Law on the Road Traffic Safety, published in early 2023 (Paragraf, 2023).⁴ Followed by high level concerns in terms of the compliance of the process, but also the content of the draft law with the evidence-based policy making principles, the draft has affected the existing text of LRTS comprehensively. Among others, for the first time, the Law has addressed the legal status/categorisation of e-scooters, including the conditions where, when, how and by whom these vehicles could be driven.

In the article 31a) of DLRTS an e-scooter is defined as a light electric vehicle is a vehicle with at least two wheels, with mechanical steering, without a place to sit, whose permanent nominal power of the electric motor does not exceed 0.6 kW, whose maximum design speed does not exceed 25 km/h and whose empty weight does not exceed 35 kg.

According to the draft Law, the drivers of e-scooters are allowed to use these vehicles on the roadways, the bike lanes, sidewalks, and pedestrian zones, but under the different conditions, in terms of the route, speed, protective equipment and the age of a driver. Namely, "the driver of a light electric vehicle, when moving on the roadway, may use the roadway with a width of no more than 1m from the right edge

² Law on Road Traffic safety in Bosnia and Herzegovina ("Official Gazette of BiH", br. 6/2006, 75/2006 - ispr, 44/2007, 84/2009, 48/2010, 48/2010 - dr. zakon, 18/2013, 8/2017, 89/2017 i 9/2018.

³ See more in: Kolaković-Bojović, Milica and Paraušić, Ana (2020) *Hate Speech on Twitter: Attitudes Toward the Drivers of Electric Scooters*. In: International Scientific Conference "Hate Speech and the Concept of Hate Crimes: Acts of Perception and Compulsory Social Conformism": conference proceedings. Faculty of Law - Kicevo, University "St. Kliment Ohridski", Bitola, pp. 35-51. ISBN 978-608-4670-12-4; Kolaković-Bojović, Milica and Paraušić, Ana (2019) *Electric Scooters: Urban Security Challenge or Moral Panic Issue*. Teme: časopis za društvenu teoriju i praksu, XLIII (4). pp. 1045-1061. ISSN 0353-7919

⁴ Law on the Traffic Safety on Roads, "Official Gazette of the Republic of Serbia", No. 41/09, 53/10, 101/11, 32/13 – CC, 55/14, 96/15 – other law, 9/16 – CC, 24/18, 41/18, 41/18 - other.

of the roadway, except on the part of the road in front of the intersection or another place where the vehicle turns left, i.e. when overtaking or going around."

The draft Law also provided that "a person under the age of 14 may not drive a light electric vehicle on public roads." "A person who has not reached the age of 18, while driving a light electric vehicle, must wear a buckled protective bicycle helmet on his head."

In the Article 92a of a Draft Law, it is prescribed that the driver of a light electric vehicle is obliged to use a bicycle path, a pedestrian-bicycle path, or a bicycle lane. Exceptionally, the driver of a light electric vehicle may use a pedestrian path, pedestrian zone or sidewalk for movement, if there is no possibility of movement on a bicycle path, pedestrian-bicycle path or bicycle lane, provided that it does not obstruct the movement of pedestrians and moves at the speed of a pedestrian, at most 5 km/h (the slow traffic zone). Exceptionally from this (already) exception, the driver of a light electric vehicle may move on the roadway where the speed limit is 30 km/h, if there is no possibility of moving on a footpath, pedestrian zone, or sidewalk.

The driver may not transport another person on a light electric vehicle. The driver of a light electric vehicle must wear a reflective vest when moving on the roadway, except in the slow traffic zone. The driver of a light electric vehicle must wear a reflective vest or be illuminated or marked with reflective material at night and in conditions of reduced visibility when moving on a bicycle path, pedestrian-bicycle path, pedestrian zone, and slow traffic zone. (Article 92b) The driver must not also drive a light electric vehicle when crossing the roadway, except when crossing the bicycle path over the roadway. (Article 92v)

When driving a light electric vehicle in traffic on the road, the driver must have with him technical documentation about the vehicle he is driving, from which the power of the electric motor, the design speed and the weight of the empty vehicle can be determined, and he is obliged to make it available for inspection at the request of an authorized person." (Article 92g)

2. THE OBJECTIVES AND METHODOLOGY

2.1. The objectives

The overall objective of this paper is to explore the public discourse towards the DLRTS in part dealing with the legal regime applicable to the use of e-scooters in Serbia.

In addition to this, this research strives to build on the 2019 findings of the research conducted by same authors and to identify trends in public perception of the subject issue, as seen by the mainstream media portals, as well as the lens of the Twitter community in Serbia.

Considering this, we aim to answer three basic research questions:

- What were the main discussions on Twitter and news media since the DLRTS was published?
- What similarities and differences could emerge by contrasting the thematic findings from Twitter and media portals?
- What are the main trends in evolving both the thematic findings from Twitter and media portals comparing 2023 against 2019 findings.

2.2. Methodology

This research was divided in several research phases:

Research phase I: Analysis of the contents of media portals in terms of their reporting on the electric scooters' articles in draft Law on Traffic Safety. At this stage, we examined media coverage of the e-scooters in leading agenda-setting newspapers and media outlets regarding in January 14- February 14 period, which matches one month period since the DLRTS has been publicly issued. The following sources were selected: *Novosti, Blic, Politika, Danas, ALo, Kurir, Informer, Srpski Telegraf, Mondo, Nova S* and *B92*. Considering the wide audience they gather, we found them relevant for framing the public discourse on the main research problem. In-depth qualitative analysis was conducted for 24 articles. Beside the articles, comments on the web sites and comments on Facebook pages of media outlets and newspapers were also analysed in order to gain a comprehensive insight into the media narrative and public response regarding the regulations of e-scooters in urban transportation. The decision to include the comments into this analysis was also triggered by the unexpected homogeneity of media content, which will be further elaborated in this paper.

Research phase II: Analysis of Twitter posts on the use of electric scooters. We analysed posts made on Twitter in the five weeks long period, namely, 116 Twitter posts published in the January 14th – February 14th 2023 period. The subject of the analyses were posts published in ex-Yugoslav languages, searchable using the key word "trotinet" (e-scooter in Serbian). However, since a many of posts had complex structure and included more than one message, at the final stage 209 of posted messages were analysed.

In terms of the coding procedure applied in both research stages, after extracting every single news, twit and comment had been analysed and individual messages from them were extracted based on the after-coding process aimed at identification of the main topic(s) it addresses and the main arguments (if any) it provides to support an attitude publicly expressed. The coding process was based on the main topics identified in the initial research conducted by the same authors in 2019 (Kolaković-Bojović & Paraušić, 2019)

Thematic category I: Electric scooters' use and impact on health.

Thematic category II: Electric scooters as an alternative means of transportation and/or ecology and financial benefit.

Thematic category III: Electric scooters as an urban security challenge.

Thematic category IV: Electric scooters as a fashion trend and/or status symbol.

Thematic category V: Hate and/or negative attitudes toward electric scooters without providing arguments or reasons in support of this attitude.

Thematic category VI: Affirmative posts about electric scooters without providing arguments or reasons in support of this attitude.

However, the analysis/coding process itself showed that two additional categories appeared to be of the great importance when it comes to the Twitter posts and comments on web and Facebook pages of media outlets:

Thematic category VII: Urban infrastructure as prerequisite of e-scooters use.

Thematic category VIII: Regulation of e-scooter use and discrimination of traffic participants.

3. THE ATTITUDES OF THE TWITTER USERS TOWARDS E-SCOOTERS - FINDINGS -

3.1. Media portals

The media discourse on the electric scooters is predominantly shaped by the topic of urban security and road safety, which has been mentioned around 86% of cases. Other topics regarding electric scooters as alternative means of transportation or electric scooters as a fashion trend are mentioned seldom.

Table 1. Topic 1 - Electric scooters as an urban security challenge

	Subtopic/media	No.	Percentage
1	Electric scooters and legislation (New Law on Traffic Safety)	30	41%
2	Safety of other traffic participants, especially pedestrians	21	30%
3	Safety of drivers of electric scooters	11	15%

Regarding the first subtopic (electric scooters and legislation), every media outlet presented parts of the new draft of the Law on Road Safety regarding electric scooters. For the first time, use of electric scooters, as well as other similar means of

transportation that fall into the micro mobility category will be regulated. The media reported about where these means of transportation can be driven, what are the speed limits, what is the age limit, prescribed penalties, what equipment and documentation drivers must have with them ect. It is also mentioned that this Law is a compromise between comfort and security and that the adoption of this law is urgent and necessary. However, there are notions of negative aspects of the new law – mainly that propositions regarding the e-scooters are inadequate, the lack of bicycle lanes makes the idea that e-scooter drivers should use them inappropriate, and that overall, the law caused confusion among the citizens. Around 40% of all mentions is devoted to this subtopic.

Second subtopic, safety of other traffic participants, especially pedestrians, comprise around 30% of analysed data. In these articles, drivers of e-scooters are framed as primarily danger to pedestrians as they can be at risk of injury due to inappropriate and irresponsible behaviour of the drivers. Especially dangerous for urban traffic safety are the propositions of the draft of Law on Traffic Safety regarding the possibility that drivers could drive electric scooter on sidewalks, which is contrary to the experiences of other European countries. Moreover, media outlets reported that these propositions could lead to possible conflicts between drivers of e-scooters and pedestrians, which could further complicate the situations on urban streets. Besides pedestrians in general, one specific group of population is framed as especially vulnerable – people with disabilities. Media also mentioned the number of accidents in which drivers of e-scooters participated as an indication of them being the security risk in urban environment. Moreover, one of the problematic questions regarding the electric scooters on urban streets is the control and monitoring of these types of vehicles.

Media in Serbia also reported on drivers of electric scooters as endangered participants in the urban traffic. Around 15% of analysed data could be related to this subtopic. Media outlets mention that propositions of the draft of Law on Road Safety actually put drivers of electric scooters in danger, and that they do not feel secure because their safety is threatened on the city streets. Moreover, with the new law drivers of e-scooters are discriminated against the bicycle drivers and the optimal solution is that they should have all the rights as bicycle drivers. Media also mention that e-scooter drivers should be especially cautious on urban streets and that they are safest on sidewalks. The data also indicate that negligent behaviour of pedestrians is what threatens the e-scooter drivers' safety in urban traffic.

To a lesser extent (13.5%) Serbian media reported on other topics surrounding the e-scooters in urban traffic. We found mentions of number of these micro mobility vehicles on Serbian street - it is estimated that there are around 200,000 electric scooters in Serbia. This is framed as one of the main reasons for introducing the e-scooters in DLTSR. Media also report on the situation regarding the regulation of electric scooters in the traffic in neighbouring countries and what are the main

solutions regarding this type of vehicles. Our data indicate several mentions about the foreign companies which activities are related to e-scooters renting that are expected to open business in Serbian cities. We found only one mention about the electric scooters that frame their positive traits – reduction of traffic jams and promotion of eco-friendly alternatives.

3.2. Comment analysis

In addition to the analysis of media articles regarding the introduction of electric scooters in the DLTSR, we also analysed the comments that users left either on media outlet web page or their Facebook page in order to capture the public response regarding the issue. Overall, 170 comments from media webpages and 36 comments from Facebook pages met the criteria for analysis. Contrary to media reporting, comment analysis indicated much greater diversity regarding the distribution of thematic categories.

Table 2. Comments on media portals

	Topic/ Thematic category	No of comments	Percentage of comments
1	Electric scooters' use and impact on health	0	0
2	Electric scooters as an alternative means of transportation and/or ecology and financial benefit	27	13,36
3	Electric scooters as an urban security challenge	85	42,07
4	Electric scooters as a fashion trend and/or status symbol	22	10,89
5	Hate and/or negative attitudes toward electric scooters without providing arguments or reasons in support of this attitude.	10	4,95
6	Affirmative posts about electric scooters without providing arguments or reasons in support of this attitude.	10	4,95
7	Urban infrastructure as prerequisite of e-scooters use.	9	4,45
8	Regulation of e-scooter use and discrimination of traffic participants	39	19,3
	Total number of comments	202	

In our analysis of user comments on media outlets and Facebook pages we did not identified comments related to the topic of electric scooters and their impact on health.

Around 14% of comments are supportive towards e-scooters on urban streets. 16 comments address benefits of driving this means of transportation regarding the

pollution, reduction of traffic jam, alternative to inefficient public transportation, convenience for short distance travel, but also stress that other vehicles, even pedestrians are the same or greater danger to security than e-scooter drivers. Moreover, 6 comment rise concern over safety of electric scooter drivers. In the number of accidents involving electric scooters is negligible when compared to traffic accidents involving cars or other motorized vehicles.

Regarding the topic 3, 85 comments (42%) related to topic of urban security. Majority of these comments reflect on danger that drivers of electric scooters present for pedestrians, especially children. Commentators also raise questions about technical characteristics of e-scooters from different manufacturers and distributors, as well as the inappropriate speed limitation proposed by Draft Law, which basically discouraging drivers to obey the law and drive slower on sidewalks. In some comments the question of control of these vehicles is being raised, as well as possibility of damage collection if driver of electric scooter causes accident or damage. Some commentators reacted suspiciously on provisions of the Draft Law stressing that it is an opportunity for distributor companies to earn profit, and state to increase number of traffic tickets. We found 5 comments that are plain insulting and approve or call for violence against the e-scooter drivers.

Regarding the category 4 the e-scooter drivers are described as having certain characteristics which can loosely put them in specific subgroup. Users of these comment usually use insulting vocabulary to describe drivers of electric scooters, sometimes even hate speech. Around 11% of all comment (22) reflect e-scooter drivers in particularly negative and stereotypical manner. The commentators used rather insulting slurs when referring to the users and/or this alternative means of transportation (“fools”, “stupid”, “trash”, “maniacs”, “freaks”), that they behave irresponsible and even use drugs and/or alcohol. Drivers of e-scooters are described as immature, negligent and bullies (“If you are older than 16 and still driving e-scooter something is wrong with you”).

In our analysis we identified 10 comments that are affirmative, without providing any particular reason for this attitude. Users simply state that these alternative means of transportation should not be banned from streets, or that propositions in Draft Law are good.

Negative comments without providing reason or explanation for this attitude were identified 10 times. Commentators usually only wrote that e-scooters should be banned from urban transportation.

In the second round of research about public discourse on electric scooters in urban traffic, a topic related to urban infrastructure suitable for driving these alternative means of transportation was recognized. 9 comments reacted negatively on provisions of the Draft Law describing where e-scooters could be driven. Users made remarks about lack of bicycle lanes in Belgrade, but especially grim situation regarding this issue

in other cities in Serbia. Moreover, commentators also addressed the unkept sidewalks as reasons why electric scooters should not be driven on them.

The question of prioritization and/or discrimination of the traffic participant, the subtopic emerged in the 2023 round of research, was recognized in 39 (19,3%) comments of analysed media outlets. Reflecting on new draft law provisions, users in revolt stressed that mothers, parents with small children and all pedestrians must pay particular attention just by using the sidewalk. They call for absolute ban of e-scooters from pedestrian zones, stating that e-scooter and their drivers have no place on sidewalks. Commentators are concerned that new draft law provisions will eventually lead to usurpation of sidewalks by electric scooters from pedestrians.

In our analysis we also registered 4 comment that could not be attributed to any of the categories, since they mentioned only that regulation of electric scooters is “side topic”, but not explaining what the main problem is covered by the issue of e-scooters in urban traffic.

3.3. Twitter posts

86 posts (74.14%) directly address the provisions of the new draft Law, while other posts comment or discuss various issues associated to use of e-scooters in general which, of course, does not exclude a possible influence of the proposed piece of legislation on their development.

Table 3. Comments on Twitter

	Topic/ Thematic category	Number of posts	Percentage of posts
1	Electric scooters' use and impact on health	10	4.78%
2	Electric scooters as an alternative means of transportation and/or ecology and financial benefit	5	2.39%
3	Electric scooters as an urban security challenge	36	17.22%
4	Electric scooters as a fashion trend and/or status symbol	29	13.87%
5	Hate and/or negative attitudes toward electric scooters without providing arguments or reasons in support of this attitude.	0	0%
6	Affirmative posts about electric scooters without providing arguments or reasons in support of this attitude.	7	3.35%
7	Urban infrastructure as prerequisite of e-scooters use.	43	20.57%
8	Regulation of e-scooter use and discrimination of traffic participants	79	37.79%
	Total number of posts	209	

As it has been previewed in the Table 2, only 10 posts (4,78%) address the impact of e-scooters on health. 8 of them deals with the negative impact of e-scooters on health explaining that people (especially kids) should walk instead of driving e-scooters. They usually provide examples of overweighted people from their environment who drive e scooters and explain that these vehicles have negative impact on the motoric development of children “who don’t run anymore”. It is important to notice that there were not at all post explaining possible health benefits of e-scooter use comparing to cars or the overcrowded public transportation.

Only 5 posts (2,39%) were dedicated to capacities of e-scooters in addressing or decreasing the traffic jam in big cities, primarily in Belgrade. Their authors see e-scooters as an optimal solution for short distance ride in the city, without paying a parking space or staying stuck in the traffic jam. This finding is of the great importance to be analysed together with the earlier mentioned infrastructural challenges. Namely, it is obvious that, even aware of the e-scooter benefits, citizens simply want to stay safe until an adequate infrastructure is built.

As previewed in the Table 2, 36 of 209 posts (17.22%) recognized electric scooters as an urban security challenge. Namely, most of the authors of the tweets from this group raised the issue of the e-scooters’ speed. Despite the legal constrains contained in the Draft Law which provides for the limitation of the e-scooters to up to 5km/h while moving on the pedestrian paths, most of the Twitter users who addressed this issue claimed that, in reality, the speed of e-scooters is much higher. They raised an issue of the ineffective speed control in the city, but also insufficient product specifications provided by producers, where some of the official product declarations simply do not include a precise information of the maximum e-scooter speed. The Twitter users claimed that the maximum speed of e-scooters could be 45km/h or even higher if some additional upgrades of the e-engine have been made. They elaborate that such upgrades are usually made out of the authorized services and therefore unevicenced and invisible to the police during the regular control. In addition to that, all of them agree that none of e-scooter drivers will be ready to reduce their speed in order to comply with the legal provisions, since it makes them as slow as pedestrians and therefore minimize of neutralize all the benefits of e-scooters’ use. To make the long story short- no one would sacrifice the benefit of staying safe while use pedestrian zone in order to drive faster out of them. Instead of that, they would simply drive fast through the pedestrians. What is also important to mention is that 12 posts approves/promotes or even invites on violence against drivers of e-scooters.

In terms of the Category 4, where in 2019 research (Kolaković-Bojović & Paraušić, 2019) the e-sooter drivers have been recognised as a specific subgroup which belongs even to the certain subculture, which also included some negative attitudes or even a hate speech (Kolaković-Bojović & Paraušić, 2020). The 2023 results showed that 29 (13.87%) posts describe e-scooter drivers in negative or even insulting or offensive manner. They are usually perceived as male gay population, insufficiently masculine,

immature, and incapable to be functional spouses or parents. The drivers of e-scooters are also described as young IT professionals and/or hipsters, project or marketing managers, “who wear a skinny jeans, backpacks and e-watch while drink a milkshake in their forties”.

7 of 209 posts (3.35%) were just affirmative, without tackling any particular benefit of e-scooters, mostly labelling them as “cool” or useful, but frequently followed by the conclusion that they are still not affordable to all, especially to the young people who would be happy to use them.

None of Twitter posts were just negative without providing reasons/explanation for that.

It important to underline that 43 posts (20.57%) address the issue of infrastructure, namely, whether e scooters should be allowed in pedestrian zones or should be driven on the streets or bike paths/corridors. 34 (79,1%) of them were in negative tone arguing that the current infrastructure in Belgrade (with the exception of the Novi Beograd and the Belgrade Waterfront) does not allow for the safe drive of e-scooters. They are elaborating the insufficient width of the sidewalks, frequently overcrowded with parked cars. They also raise the hilly landscape of Belgrade which does not allow an equal use of e-scooters in all parts of the city. A lot of twits are followed by photos to illustrate to complicated/dangerous (or impossible) conditions to drive e-scooters on the sidewalks and/or pedestrian zones.

The second large group of posts in addition to the 2019 categories brings 79 of 209 posts (37.79%), that concern the issue of prioritization and/or discrimination of the traffic participants.

Such a revolted reaction of the twitter users is directly associated to the set of a new draft law provisions which, among others, obliges the pedestrians to double check a situation in the pedestrian zone looking to all the sides prior to go out of the buildings, or to keep their kids and pets next to their legs/body while walking. In the same manner, the pedestrians are forbidden to walk with their arms/elbows distanced from the body, or to hug friends they meet on the street.

For most of the Twitter users who posted on this, such an approach of the legislator is about to overtake the pedestrian zones from pedestrians and to tuned them into the e-scooter paths. These users especially criticize the new provisions from the angle of the needs of parents with small children (including babies), but also taking into account specific needs of elder people, who might be forced not to use their usual pedestrian paths in order not to be in dangerous or hurt by e-scooters. Some of the Twitter users say that such provisions suppress the natural interpersonal and family relations, forcing people to behave artificially. Therefore, the buzzwords of this group of twits were “prioritization” and “discrimination”.

Finally, 3 posts (1.43%) cannot be affiliated to any of the abovementioned categories, since they belong to the promoted posts of e-scooter producers or to the prize games where players can win e-scooters.

DISCUSSION AND CONCLUSIONS

The above presented results shows that the citizens recognise an importance of adopting regulations of e-scooters use, but also proves the necessity to do that in transparent and inclusive manner, since the public opinion on the possible modalities to do so varies to the great extent, which also indicates a lack of the evidence-based or at least evidence-informed approach in developing public policies in that regard. (Kolaković-Bojović, 2022)

The reason for additional concern could also be found in the fact that there is a great discrepancy between public attitudes present in the news published on media portals, comments accompanying those news and posts published on Twitter. Namely, while journalists are mostly concerned by safety aspect, twitter users raise their voice to prevent any discrimination or favouritism of the certain categories of traffic participants. They also urge for further development of urban infrastructure prior to foster use of e-scooters and other light electric vehicles. It is important to mention that an influence of e-scooters or LEVs on the urban traffic, prevention of air pollution and the protection of the urban environment in general has been completely marginalised in both media and Twitter discourse. The same goes for the direct impact on health where, even in a small percentage of posts/comments where this topic appears, the impact of e-scooters on health is perceived exclusively in the negative context. This shows that e-scooters are rather perceived as an alternative to walk/cycling than to use of cars or old fashion public transportation means, like buses or trams.

In terms of the trends in public discourse on e-scooters in 2019-2023 period, in terms of media, if we compare the thematization of main topics of media discourse on electric scooters some important observations could be made. Although the topic of electric scooters as urban security challenge is dominant in previous as in current research, data indicate that this topic overtook all other topics by far. In 2019 electric scooters were pictured as urban security issue in around 70% of the cases, while this share is over 85% in 2023. Topic of electric scooters as alternative eco-friendly means of transportation has been mentioned only once in current research, while the topic of electric scooters as a fashion trend or a status symbol could not be recognized.

In parallel, when it comes to the attitudes of Twitter users, the most significant difference is visible in decreasing perception of e-scooters as an alternative mean of transportation. Namely, while 16% of Twitter posts were dedicated to this issue in 2019 research, in 2023 this percentage has been decreased to 2.39%. As previously mentioned, the best explanation for this change can be found in the increased use of e-scooters paired with the insufficiently developed infrastructure.

The second greatest change can be seen in fact that compared with 11.2% in 2019, in 2023 there was no posts expressing hate/negative emotions towards the e-scooters without providing reasons for such position. This change can be explained by the fact that this four-year period has allowed citizens to get more experience with use of e-scooters in their urban communities and to realise what they actually don't like about them. Additional reason can be also found in fact that 2023 research has been conducted in the period when there was the peak of the discussion on the DLRTS, therefore, as we previously said 86% of Twitter posts were dedicated to its provisions, namely, based on the concrete, proposed legal provisions. The percentage of these kind of comments on web and Facebook pages are rather small, which is in accordance with the results of Twitter post analysis. According to the previously presented results, it is obvious that a lack of proper infrastructure and the fear of discrimination/unequal treatment of urban traffic participants are the most represented arguments in elaborating negative attitudes on e-scooters and the proposed legal provisions.

The third important change is increased perception of e-scooters like a fashion trend (29% compared with 21% in 2019). However, in addition to the increased share, it is important to mention a visible change within this group of posts in a meaning that in 2023 there were no Twitter users who see e-scooter as a status symbol, while, at the same time, the perception of their drivers as persons who belongs to the specific subgroups or even subculture is much represented. In parallel, the wording and the tone of such post is much harsher and stronger, with a frequent use of insulting approach or even a hate speech. The comment analysis also indicated similar finding regarding the description of e-scooter driver in rather offensive tone, although in lesser share (11%)

Differently from the media discourse, the share of posts that address e-scooters as urban security challenge has been decreased from 44% to 36%, but this change is obviously triggered by the transition from a bit abstract discussion in 2019 to 2023 debate on the DLRTS, that has brought a clear input in terms of the speed, required/allowed paths, etc. However, the web and Facebook page comment analysis is supportive of Twitter post analysis.

Finally, the same, a minor (5%) share of Twitter users addressed e-scooters from the perspective of their impact on health, providing the more or less same arguments.

Considering all the presented findings as well as analysed trends in 2019-2023 period, it is obvious that a growing concerns of Serbian citizens on the use of e-scooters are based on the clear arguments that needs to be taken into account in the process of the further development of public policies in the field, including finalisation of DLRTS.

In addition to this, the presented change in public discourse speaks in a favour of the need to inform citizens on the potential benefits and risks associated to the increase use of e-scooters, as well as on the individual or joint actions planned in order not only to rule the use of e-scooters, but also to make this use safe for all traffic participants, without discrimination of any category of them.

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ELEKTRIČNI TROTINETI KAO PROBLEM URBANE BEZBEDNOSTI: JAVNI DISKURS O NOVOM ZAKONU O BEZBEDNOSTI SAOBRAĆAJA NA PUTEVIMA

Kako napraviti balans između potrebe da se obezbedi odgovor na sadašnje izazove u oblasti bezbednosti saobraćaja i izazove urbane bezbednosti, i to u skladu sa kreiranjem politike zasnovane na dokazima? Kreatori politika u Srbiji zainteresovani su za ovaj fenomen imajući u vidu da su ekstenzivna upotreba električnih trotineta na ulicama i nepostojanje regulative za ovaj tip vozila postali stvarni problemi. Pokušaji da se ovo pitanje uredi izazvali su veliku pažnju stručne i šire javnosti. U radu je analiziran javni diskurs o nacrtu Zakona o bezbednosti saobraćaja na putevima, kako bi se identifikovali glavni stavovi građana prema uslovima korišćenja e-trotineta. Primjenjujući analizu sadržaja vesti na medijskim portalima i objavama na Tviteru, autori su takođe iskoristili priliku da uporede svoje nalaze iz 2023. godine sa rezultatima inicijalnog istraživanja iz 2019. godine kako bi predstavili trenutni javni diskursu o električnim trotinetima, ali i identifikovali glavne trendove koji opisuju kako se ovi stavovi menjaju tokom vremena. Autori su takođe identifikovali potrebu da se promeni način na koji donosioci odluka o ovom pitanju komuniciraju sa građanima na koje se planirane zakonske izmene odnose.

KLJUČNE REČI: električni trotinet / trotinet / lako električno vozilo (LEV) / urbana bezbednost / bezbednost saobraćaja na putevima