

ŠTA NAM DONOSE IZMENE DIREKTIVE EC 2008/96?

WHAT DOES THE AMENDED DIRECTIVE 2008/96 BRING US?

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Abstract: The Road Infrastructure Safety Management Directive was adopted in 2008 to ensure that road safety considerations are at the forefront of all phases of the planning, design and operation of road infrastructure. However, there are big differences in the way the Directive has been implemented by Member States, with many high-performing countries going beyond the requirements of the Directive, and other countries lagging behind. The general objective of the proposed initiative was to reduce road fatalities and serious injuries on EU road networks by improving the safety performance of road infrastructure. Although some Member States continue to make considerable progress each year, EU-wide road fatality rates have stagnated in recent years. Road safety stakeholders have reacted to the slowdown with renewed commitment to the cause, as expressed by EU transport ministers in the Valletta Declaration of March 2017 on road safety.

Keywords: road safety audit, road safety inspection, EC Directive 2008/96, infrastructure

Rezime: Direktiva o upravljanju bezbednosti saobraćajne infrastrukture donesena je 2008. godine kako bi se osiguralo razmatranje o bezbednosti saobraćaja u okviru faze planiranja, dizajna i eksploatacije saobraćajne infrastrukture. Međutim, postoje značajne razlike u načinu na koji države članice Evropske unije sprovode Direktivu, jer mnoge razvijene zemlje nadilaze zahteve propisane direktivom dok ostale zemlje zaostaju. Opšti cilj predložene inicijative bio je smanjiti poginule i teške povrede na Evropskoj mreži puteva, poboljšavajući bezbednost saobraćajne infrastrukture. Iako neke države članice i dalje znatno napreduju svake godine, stopa poginulih na putevima EU stagnira posljednjih godina. Subjekti bezbednosti saobraćaja reagovali su na ovo stagniranje kroz ponovno definisanje uzroka, što je naglašeno kroz Valleta deklaraciju o bezbednosti saobraćaja iz marta 2017. godine.

Ključne reči: revizija bezbednosti saobraćaja, provera bezbednosti saobraćaja, EK Direktiva 2008/96, infrastruktura

1. INTRODUCTION

Road safety in the EU has greatly improved over the past few decades thanks to action at EU, national, regional and local level. Between 2001 and 2010, the number of road deaths in the EU fell by 43 %, and by another 19 % between 2010 and 2016. In 2016, 25 620 people lost their lives on EU roads, 510 fewer than in 2015 and almost 5 900 fewer than in 2010.

Although some Member States continue to make considerable progress each year, EU-wide road fatality rates have stagnated in recent years. Road safety stakeholders have reacted to the slowdown with renewed commitment to the cause, as expressed by EU transport ministers in the Valletta Declaration of March 2017 on road safety.

Backed by this political impetus, the Commission is also proposing, at the same time as this initiative, a road safety framework for 2020-2030 that is better adapted to the known challenges and to the changes in mobility resulting from societal trends (e.g. more cyclists and pedestrians, an ageing society) and technological developments. The proposed framework follows the "Safe System approach". This approach is based on the principle that human beings can and will continue to make mistakes and that it is a shared responsibility of actors at all levels to ensure that road crashes do not lead to serious or fatal injuries. According to the "Safe System approach", the safety of all parts of the system must be improved — roads and roadsides, speeds, vehicles and road use so that if one part fails, other parts will still protect those involved.

Road infrastructure will continue to be very much part of the new approach. Well-designed and properly maintained roads can reduce the probability of road traffic accidents, while "forgiving roads" (roads laid out in an intelligent way to ensure that driving errors do not immediately have serious consequences) can reduce the severity of accidents that do happen. The general objective of the proposed initiative is to reduce road

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fatalities and serious injuries on EU road networks by improving the safety performance of road infrastructure.

2. THE MAIN SYSTEMIC CHANGES

The revised Directive aims to achieve above mentioned by introducing some main changes:

- mandating transparency and follow-up of infrastructure safety management procedures;
- introducing a network-wide road assessment, a systematic and proactive risk mapping procedure to assess the "in-built", or inherent, safety of roads across the EU;
- extending the scope of the Directive beyond the trans-European transport network (TEN-T) to cover motorways and primary roads outside the network as well as all roads outside urban areas that are built using EU funds in whole or in part;
- setting general performance requirements for road markings and road signs to make it easier to roll out cooperative, connected and automated mobility systems; and
- making it mandatory to systematically take vulnerable road users into account in all road safety management procedures.

3. THE MAIN REASONS FOR THE AMENDMENT AND ITS OBJECTIVES

Five years after the adoption of the Directive, the Commission published the findings of the ex-post evaluation of the existing Directive, an assessment of its impact.

In preparing the impact assessment for this proposal, the Commission has carried out a number of stakeholder consultation activities. Some of these were part of the impact assessment study carried out by an external contractor (COWI, SWOV, and Prof. George Yannis, National Technical University of Athens).

It is clear from the evaluation of the effects of Directive that Member States which have been applying road infrastructure safety management principles on a voluntary basis to their national roads beyond the TEN-T network (which account for only 8 % of fatalities in the EU) have achieved a much better road safety performance than Member States which do not do so.

A large proportion of road accidents occur on a small proportion of roads where traffic volumes and speeds are high and where there is a wide range of traffic travelling at different speeds. Therefore the limited extension of the scope of Directive to motorways and primary roads beyond the TEN-T network should contribute significantly to the improvement of road infrastructure safety across the EU. Due to high traffic volumes, the primary EU road network represents a high percentage of fatalities compared to the share of these roads in the total road network (15 % of the road network outside urban areas in terms of road kilometres accounts for some 39 % of all road fatalities in the EU).

From the above, a proposal was made to transfer the Directive to motorways and other primary roads that are not on the TEN networks.

The initiative is closely linked also to the proposal for revising the General Safety Regulation and the Pedestrian Safety Regulation. The proposal aims to improve the rules on vehicle safety by means of additional safety features, including active safety systems designed to prevent accidents, and features to protect vulnerable road users (also motorcyclists). The two initiatives interlink where vehicle technology relies on infrastructure (e.g. visible road markings to support lane-keeping assist).

On technological developments, the proposal is also closely linked to initiatives that are part of the Commission's Strategy on Cooperative Intelligent Transport Systems (C-ITS).

All these initiatives should be seen as part of a broad set of measures addressing road safety from the Safe System perspective.

According to the "Safe System approach", death and serious injury in road accidents is largely preventable. It should be a shared responsibility at all levels to ensure that road crashes do not lead to serious or fatal injuries. In particular, well-designed and properly maintained roads should reduce the probability of road traffic accidents, whilst "forgiving" roads (roads laid out in an intelligent way to ensure that driving errors do not immediately have serious consequences) should reduce the severity of accidents.

Sections of the road network adjoining road tunnels of the trans-European road network covered by Directive 2004/54/EC of the European Parliament and of the Council have a particularly high accident risk. Joint road safety inspections of these road sections involving representatives of both the competent road and tunnel authorities should therefore be introduced in order to improve the safety of the road network as a whole.

Vulnerable road users accounted for 46% of road fatalities in the Union in 2016. Ensuring that the interests of these users are taken into account in all Road Infrastructure Safety Management procedures should therefore improve their safety on the road.

In order to achieve transparency and improve accountability, key performance indicators should be reported.

4. NOVELTIES

Expected novelties are:

- This Directive shall apply to roads which are part of the TEN corridors, to motorways and to primary roads, whether they are at the design stage, under construction or in operation. But the Directive will be also implemented on other motorways and primary roads that are not on the TEN corridors (as well as on all other roads whose construction is partly or fully financed by EU funds).
- "Primary roads" are defined very clearly: "primary road" means a road that is not a motorway but connects major cities or regions, or both, and is defined as a primary road in the Euro Regional Map, produced by the National Mapping and Cadastral Agencies of Europe.
- Instead of Network Safety Management (which is a reactive process), a new "network-wide road assessment" is being introduced, based on a proactive approach.
- The definition of vulnerable road users is widespread: "vulnerable road users" means non-motorised road users, including, in particular, cyclists and pedestrians, as well as users of powered two-wheelers.
- In my opinion, one of the most important systemic changes is in Article 6 (1): "Member States shall ensure that road safety inspections are undertaken on the road network in order to identify road safety related features and prevent accidents. The selection of the road sections to be subject to this inspection shall be based on the results of the assessment carried out pursuant to Article 5, with priority being given to high risk sections. It seems this is the new guideline, but this is not mentioned anywhere.
- The contents of all the Annexes have been changed (and amended).

The tasks of the ministries of the member states

The tasks of the ministries of the member states are in following:

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 18 months following the entry into force at the latest. They shall forthwith communicate to the Commission the text of those provisions.

Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

5. CONCLUSIONS

Road safety in the EU has greatly improved over the past few decades thanks to action at EU, national, regional and local level.

Although some Member States continue to make considerable progress each year, EU-wide road fatality rates have stagnated in recent years. Road safety stakeholders have reacted to the slowdown with renewed commitment to the cause, as expressed by EU transport ministers in the Valletta Declaration of March 2017 on road safety.

Backed by this political impetus, the Commission is also proposing, at the same time as this initiative, a road safety framework for 2020-2030 that is better adapted to the known challenges and to the changes in

mobility resulting from societal trends and technological developments. The proposed framework follows the Safe System approach. This approach is based on the principle that human beings can and will continue to make mistakes and that it is a shared responsibility of actors at all levels to ensure that road crashes do not lead to serious or fatal injuries. According to the Safe System approach, the safety of all parts of the system must be improved — roads and roadsides, speeds, vehicles and road use so that if one part fails, other parts will still protect those involved.

Road infrastructure will continue to be very much part of the new approach.

FOOTNOTE

The predominant part of this article is prepared by quoting the paragraphs listed in the Proposal for a Directive of the European Parliament and of the Council amending Directive 2008/96 on road infrastructure safety management, Brussels, 18.05.2018.

IDENTIFIKACIJA NAJUTICAJNIJIH INDIKATORA BEZBEDNOSTI SAOBRAĆAJA U KOMPOZITNOM INDEKSU BEZBEDNOSTI SAOBRAĆAJA- STUDIJA SLUČAJA: EVROPSKA UNIJA

IDENTIFYING THE MOST SIGNIFICANT INDICATORS OF THE TOTAL ROAD SAFETY PERFORMANCE INDEX- CASE STUDY: EUROPEAN UNION¹

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Abstract: The review of the national and international literature dealing with the assessment of the road safety level has shown great efforts of the authors who aimed to define the methodology for calculating the composite road safety index on a territory (region, state, etc.). The procedure for obtaining a road safety composite index of an area has been largely harmonized. The question that has not been fully resolved yet concerns the selection of indicators. There is a wide range of road safety indicators used to show the road safety situation in a territory. The road safety performance index (RSPI) obtained on the basis of a larger number of safety performance indicators (SPIs) enables decision makers to more precisely define earlier goal-oriented actions. Recording a broader comprehensive set of SPIs helps identify the strengths and weaknesses of an area's road safety system. Providing high quality national and international databases that would include comparable SPIs seems to be difficult since many countries dispose of a small number of identical indicators available for use. Therefore, there is a need for calculating a road safety performance index with a limited number of indicators (RSPI_{in}) which will provide a comparison of sufficient quality, of as many countries as possible. The application of the Data Envelopment Analysis (DEA) method and correlation analysis has helped to check if the RSPI_{in} is likely to be of sufficient quality. A strong correlation between the RSPI_{in} and the RSPI based on all indicators has been identified using the proposed methodology. This will help achieve the standardization of indicators including data collection procedures and selection of the key list of indicators that need to be monitored.

Keywords: road safety level, road safety performance index, most significant indicators

Rezime: Analizirajući domaću i svetsku literaturu o oceni nivoa bezbednosti saobraćaja, uočava se ogroman napor autora da definišu metodologiju za proračun kompozitnog indeksa bezbednosti saobraćaja na jednom području (region, država i sl.). U tom smislu, postupak za dobijanje kompozitnog indeksa bezbednosti saobraćaja za neko područje usaglašen je u velikoj meri. Pitanje koje još nije u potpunosti rešeno, odnosi se na izbor pokazatelja koji ulaze u proces izračunavanja kompozitnog indeksa. Postoji široka lepeza pokazatelja bezbednosti saobraćaja kojima se predstavlja stanje bezbednosti saobraćaja na nekoj teritoriji. Za očekivati je da je ocena stanja bezbednosti saobraćaja preciznija kada je dobijena na osnovu većeg broja indikatora bezbednosti saobraćaja (IBS), a koji imaju najjaču korelacionu vezu sa saobraćajnim nezgodama i njihovim posledicama. Međutim, snimanje većeg broja IBS je skuplje i teško je obezbediti kvalitetne nacional and international baze podataka koje bi obuhvatile uporedive IBS. Na nekim prostorima se ne snimaju IBS, negde se snima samo manji broj IBS, a u nekim slučajevima, snimaju se po različitoj metodologiji. Autori su analizirali opravdanost izračunavanja kompozitnog indeksa bezbednosti saobraćaja na osnovu manjeg broja indikatora, odnosno proveravali su da li su kompozitni indeksi koji bi se dobili na osnovu 5, 4 ili samo 3 IBS dovoljno kvalitetni. Primenom metodologije za proračun KIBS, metodom korelacione analize dobijene su najuticajnije kombinacije od tri, četiri i pet IBS koje verodostojno predstavljaju stanje bezbednosti saobraćaja u 21 odabranoj zemlji Evropske unije. Na bazi dobijenih rezultata, autori su zaključili da je moguće, sa ograničenim brojem indikatora, oceniti nivo bezbednosti saobraćaja na nekoj teritoriji, sa prihvatljivim kvalitetom ocena.

Ključne reči: nivo bezbednosti saobraćaja, kompozitni indeks bezbednosti saobraćaja, najuticajniji indikatori

¹ Related research has been published in: Tešić, M., Hermans, E., Lipovac, K., and Pešić, D. (2018). Identifying the most significant indicators of the total road safety performance index. Accident analysis and prevention, 113, 263-278, <https://doi.org/10.1016/j.aap.2018.02.003>

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