

ASECAP Road Safety Conference

Road Safety – A shared responsibility

A story of success or failure?



BRUSSELS, EUROPEAN ECONOMIC AND
SOCIAL COMMITTEE

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Proposals for the unification of the road safety related regulation



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Introduction



European Union is on one hand aiming towards greater uniformity in the rules, solutions and products, but on the other hand, we can easily recognise that the answers and solutions to many fundamental problems are left to individual Member States.

The goal of this presentation is not to expose right or wrong solutions in different countries but to convince responsible authorities that the unification of solutions is necessary to ensure safe and smooth flow of traffic, especially on the roads that are part of Trans European Network. We are convinced that the unification itself will assure optimal traffic safety related solution.

The following issues addresses three in basicly different fields, but they are all more or less related to road safety:

- How to form **emergency lanes** during congestions caused by traffic accidents or other unexpected events,
- **Colours of reflective elements** on road side delineators or guard rails and
- **Variable message signs.**

Emergency lanes



How to form the emergency lane

EU countries have different rules for positioning vehicles in the case of traffic jams on motorways. In some countries, vehicles are positioned in the emergency lane, but in Slovenia this is not permitted.

Drivers in EU countries have different instructions for positioning vehicles in the case of traffic jams. In Slovenia, it is not permitted to position the vehicle on the emergency lane, while in Austria and Germany this is permitted. Therefore, in Slovenia we strive to determine positioning of vehicles more precisely, with legislation. Emergency vehicles, struggling to reach the point of accident using the lane formed between the lines of vehicles in the fast and driving lanes, or using the emergency lane, pose a great problem. Because the instructions for positioning the vehicles are not unified, we are faced with dangerous situations and losses in the response and rescue time.

Emergency lanes



But first let's see what Wikipedia has to say about it:

A shoulder, or **hard shoulder is an emergency stopping lane** by the verge of a road or motorway, on the right in countries which drive on the right, or on the left side in Japan, the UK, Australia, and other left-side driving countries. Many wider U.S. as well as Swedish freeways have shoulders on both sides of each directional carriageway, in the median as well as at the outer edges of the road, for additional safety. Shoulders are not intended for use by through traffic, although there are exceptions (see below).

Shoulders have multiple uses, including:

- In the event of an emergency or breakdown, a driver can pull into the shoulder to get out of the flow of traffic and obtain a greater degree of safety.
- **Emergency vehicles such as ambulances and police cars may use the shoulder to bypass traffic congestions.**
-

Emergency lanes



Germany



RETTUNGSGASSE

BITTE

**BEI STAU-
BILDUNG:
RETTUNGSGASSE**

RETTET AUCH IHR LEBEN

QR code

Icons: blue car, orange car, green car, red car, blue car, pink car, green car

Icon: yellow siren

Small icons at the bottom: x, p, w

The sign is a yellow rectangle with a red border. At the top, the word 'RETTUNGSGASSE' is written in large, bold, red capital letters. Below this, a large red arrow points upwards. Inside the arrow, the word 'BITTE' is at the top, followed by a yellow siren icon, and then the text 'BEI STAU-BILDUNG: RETTUNGSGASSE' in yellow. The arrow is flanked by two columns of colorful car icons (blue, orange, green on the left; blue, orange, blue, pink, green on the right). A QR code is located in the top right corner of the sign. At the bottom of the sign, the text 'RETTET AUCH IHR LEBEN' is written in red. At the very bottom of the sign, there are small icons for a printer, a presentation, and a document.

Emergency lanes

Germany



Emergency lanes



Austria



Emergency lanes



AB 1.1. 2012 PFLICHT BEI STAUBILDUNG

GEMEINSAM LEBEN RETTEN

WEG FREI FÜR DIE RETTUNGSGASSE

„Wer schnell hilft, hilft doppelt: Für Rettung, Feuerwehr und Polizei zählt im Ernstfall jede Sekunde. Die Rettungsgasse soll die Helferinnen und Helfer bei ihrer Arbeit unterstützen. Danke für Ihre Hilfe!“

Doris Bures, Bundesministerin für Verkehr

„Die Rettungsgasse ermöglicht den Rettungskräften auf Autobahnen und Schnellstraßen rascher zum Unfallort zu kommen. Sie hilft mit, die Verkehrssicherheit zu verbessern. Die ASFINAG informiert gemeinsam mit den Partnerorganisationen die Autofahrer rechtzeitig und umfassend über das ab 1. Jänner 2012 geltende Gesetz, damit die Verkehrsteilnehmer wissen, wann und wie die Rettungsgasse zu bilden ist.“
DI Alois Scheidl und Dr. Klaus Schierhackl,
Vorstände der ASFINAG

WO?

Ab 1.1. 2012 ist auf Österreichs Autobahnen und Schnellstraßen bei Staubildung die Rettungsgasse Pflicht. Sie wird immer zwischen der äußersten linken und der danebenliegenden rechten Fahrspur gebildet.

WANN?

Sobald der Verkehr ins Stocken gerät und ein Stau droht, wird der Weg freigemacht. So können Rettung, Feuerwehr und Polizei im Notfall ungehindert passieren und bis zu 4 Minuten sparen.

WIE?

Alle Fahrzeuge der äußersten linken Spur ordnen sich parallel zur Straße am linken Rand ein. Alle anderen fahren nach rechts, auch auf den Pannostreifen. Eine lebensrettende Gasse entsteht, die im Notfall das Überlebenschancen von Unfallopfern um bis zu 40% erhöht.



Bilden Sie die Rettungsgasse, sobald auf Autobahnen oder Schnellstraßen der Verkehr ins Stocken gerät. Egit, ob Einsatzfahrzeuge bereits in der Nähe sind oder nicht.

Lenken Sie Ihr Fahrzeug zum Straßenrand und richten Sie es parallel zur Rettungsgasse aus. Halten Sie dabei ausreichend Sicherheitsabstand zum vorderen Fahrzeug.

BEI ZWEI SPUREN:



Bei zweispurigen Autobahnen und Schnellstraßen fahren Sie auf der linken Spur so weit wie möglich an den linken Straßenrand, auf der rechten Spur fahren Sie so weit wie möglich an den rechten. Benutzen Sie dabei auch den Pannostreifen. Das gilt für Autos genauso wie für Motorräder, LKWs und Busse.

BEI MEHR SPUREN:



Bei drei- oder mehrspurigen Autobahnen und Schnellstraßen gilt dasselbe System. Alle Fahrzeuge auf der äußersten linken Spur fahren so weit wie möglich nach links. Alle anderen Spuren fahren so weit wie möglich nach rechts – auch auf den Pannostreifen.

Emergency lanes

Slovenia

EMERGENCY LANE DURING CONGESTION

SAVE A LIFE
Consider the appropriate positioning of vehicles on the motorway in cases of congestion.

REŠI ŽIVLJENJE

up to 40% more chances of survival

With the appropriate positioning of vehicles which are not involved in an accident on a motorway, we allow emergency vehicles faster access to the injured, which increases their chances of survival by 40%.

If vehicles ahead begin to stop on the road, **the positioning of vehicles GREATLY IMPACTS** help to the injured in cases of accident. Therefore, consider the appropriate positioning of vehicles when congestion occurs.

When congestion occurs...
Enough space for emergency vehicles must be left between the lines of vehicles in the fast and driving lanes. Emergency vehicles are equipped with blue or yellow lights (rescue service, fire fighters, police, regular maintenance operator, inspection services, etc.).

Vehicles in the driving lane must move to the extreme right and vehicles in the fast lane must move to the extreme left.

Fine
Inappropriate positioning of vehicles during congestion on a motorway or expressway is subject to a fine of EUR 200.

www.dars.si

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Emergency lanes



do 40 %
večja možnost
preživetja

Upoštevaj pravilno razvrščanje
vozil **ob zastoju** na avtocesti!

S pravilno razvrstitvijo vozil, ki niso udeležena v prometni nesreči na avtocesti, omogočimo reševalnim vozilom hitrejši dostop do ponesrečenec in s tem povečamo možnost preživetja tudi do 40 %.

Spravititev vozil v primeru prometne nesreče na avtocesti **POMEMBNO VPLIVA na reševanje** poškodovanih, zato ob vsakem zastoju upoštevajte pravilo o razvrščanju vozil.

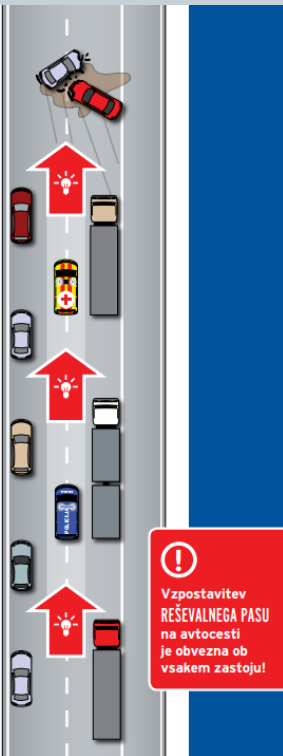
Vedno, ko pride do zastoja...

Med kolonama vozil na prehitevalnem pasu in voznem pasu mora biti dovolj prostora za vožnjo intervencijskih vozil, ki so opremljena z modro ali rumeno lučjo (reševalci, gasilci, policija, izvajalec rednega vzdrževanja, inšpekcijske službe,...).

Vozila na voznem pasu se morajo razvrstiti na desno stran do robne črte, vozila na prehitevalnem pasu pa na skrajno levo stran do robne črte.

Globe

Predpisana globa za nepravilno razvrščeno vozilo ob zastoju na avtocesti in hitri cesti je **200 evrov**.



If we want the emergency lane to be wide enough for heavy fire-fighter trucks, vehicles should move beyond edge lines.

So in Slovenia we first have to update the legislation and then start to educate drivers how to stop the vehicle and which part of the road is intended for broken down vehicles and which for emergency vehicles in case of traffic accidents.

Emergency lanes



A snapshot of the actual event



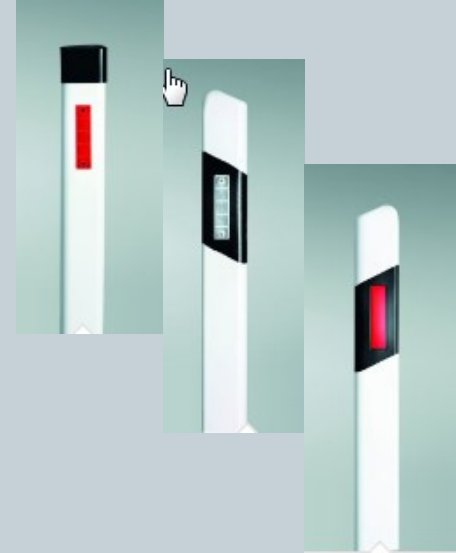
Colours of reflective elements on road side delineators



This problem is also related to inconsistent regulations between European countries. The colour of the markings on the edge of the motorway with dual carriageway differ from country to country. Most often used colours are red and white. But in some countries you can see that they can be yellow. Blue colour is sometimes used to mark minimal safety distance for heavy vehicles.

Reflective markings are posted on pillars and guard rails on the open sections of the roads. LED markings mostly used in tunnels are posted on pavement at the edge of the carriageway. The colour of markings however, does not directly influence safety, except maybe in the case of driving in the opposite direction.

The problem is not present directly in safety, but in the legal provisions of the Member States of the EU. Different countries regulates this meter differently.



Colours of reflective elements on road side delineators



It is not the question whether those markings are useful or not (I think we all are convinced that they are), but does the driver get basic idea how they can help him.



Colours of reflective elements on road side delineators



Member States of the EU have different colours of markings of the carriageway edge on motorways.

Some examples:



Variable message signs



Variable message signs are very useful road equipment for efficient traffic management and can also be used to inform drivers about weather conditions, road and traffic conditions, dangerous activities such as wrong way driving.

Different means of variable message signs:

- Variable message signs for traffic management,
- Informational variable message signs,
- Combination of both.

The use and validity of variable message signs differ among EU members.

Variable message signs



Variable message signs for traffic management



Variable message signs



Informational variable message signs,



Variable message signs



Combination of traffic management and information



Variable message signs



When used for traffic management variable message signs can be:

- Variable message sign is displaying continuously only one content (sign),
- Variable message sign with only one content that incorporate sensors for different characteristics (speed, height, ...) that can activate blinking effect to draw attention of the driver to the violation of specific regulations,
- Variable message signs with two contents that exchange in short period (for instance every two seconds).

If we use variable signs for all those purposes we are faced with two basic questions:

1. Validity of blinking or exchanging traffic signs.
2. Hierarchy of road signs (static and variable signs).

Variable message signs

Example: two different signs exchanging



Variable message signs

Hierarchy of different kind of traffic signs.



Variable message signs



Variable message signs are used in many EU countries but in many different ways:

- as the most important way for traffic management,
- only as a way to inform drivers about road, traffic or weather conditions,
- they are not recognised as a road signs.

In countries where variable message signs are used, their relation to static signs is more unified. They have the same meaning as static signs and their significance must be unified.

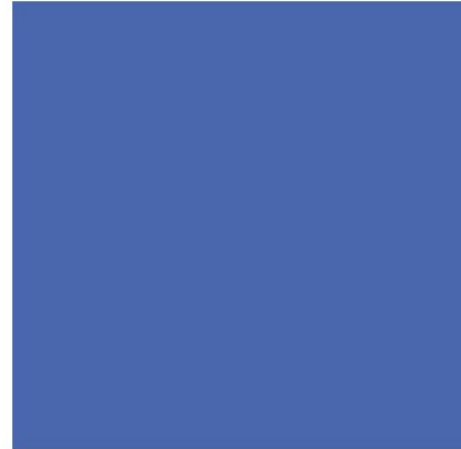
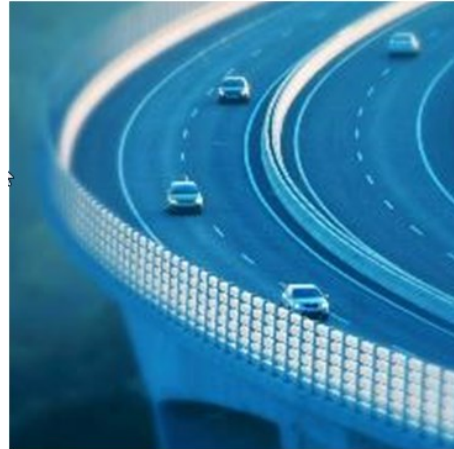
Proposals for unification - conclusions



Following the example of the EU directives we are consistently equipping roads and tunnels with modern equipment and signs and thus we are trying to increase traffic safety.

EU should also provide guidelines for very different areas:

- Rules for positioning vehicles in the case of traffic jams;
- Colours for reflective road side markers;
- Use and credibility of Variable Message Signs (VMS);
- Rescue routes (open passage to motorways);
- Number and shape of the signage before tunnels, splits ...



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Thank you
for your attention!