

The Associations of Drivers against Daytime Running Lights Worldwide

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An open letter to whom it may concern, plus

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Recorded Delivery

Dear Mr. Verheugen and Mr. Gorzkowski,

The Case Against Lethal Vehicle Daytime Running Lights

"Daytime running lights are yet another measure that seeks to promote the safety of those in cars to the detriment of those outside them. They make all road users without lights relatively less conspicuous and therefore put them at greater risk."

Professor John Adams, Ph.D. (University College London)

As Attorney-at-Law Dr. Gerald G. Sander, M.A., Mag.rer.publ., Stuttgart, Germany mentioned, Daytime Running Lights (DRL) imply violations against:

- The convention concerning the power of Authority
- The Law in respect of the protection of Infants (1969)
- The Obligation of Protection
- The Principle of Equality
- Declaration of Human Rights (1948) Article Three
- The Laws of Logic
- Public Ethics and Morals

Not a single Ethics Commission on earth would sanction a comparable 'Clinical Trial' (e.g. *two years 'Tagfahrlicht in Austria'*)

A mono-causal construct, a one-dimensional measure like DRL is inapt. Highly complex and dynamic traffic scenarios with intertwining processes impinging upon visual -, sensory physiological -, cognition psychological - and neurophysiological functions require appropriate, adequate and suitable measures. Common sense being adequate to criticise a kind of random logic when 'protecting' one group of 'traffic relevant objects' whilst sacrificing the rest¹.

Over millions of years man has learned (epigenetics) to react adequately to moving stimuli in his peripheral visual fields, provided that 'signal to noise ratios' stay within limits. 'Over-accentuations' (DRL, dipped headlights, surrogates) were not planned in the evolution - they cause disturbances of cognitive processes and 'overload' of visual short term memory, Inattentional Blindness, Sustained Inattentional Blindness, Change Blindness, Masking, Motion Induced Blindness (see Michael Bach's Computer Demonstration, demos of Simons, etc), Repetitive Blindness etc. Electrophysiological and functional magnetic resonance (fMRI) examinations, sensory physiology, cognition psychology and brain research demonstrate and prove such induced dysfunctions.

¹ Children: the largest group endangered by DRL

Headlights (especially if misaligned) and HI-LED (DRL) (isotropic) light sources can cause distraction and retinal adaptation problems together with prolonged 'retinal recovery' time, especially in elderly drivers (disability glare). Complex and highly dynamic traffic scenarios require adequate 'instant' undisturbed analysis ('gist' of a scene) and proper reaction without delay.

Over-accentuated spots (DRL) cause irritation, cognitive deficits and grave dysfunction:

- Failure to perceive
- Failure to recognize
- Failure to pay attention
- Failure to react adequately - inevitably provoking sequelae

Critical number, critical intensity

Capacitive problems of cognitive processes may occur if a (surprisingly) low number of moving light stimuli exceeds a critical quantity. Transcending critical intensities of stimulation may inflict even more and other complications. Glare due to HID (High Intensity Discharge bulbs) and HiLED (High Intensity Light Emitting Diodes) etc. causes irritation or even incapacities. Extremely bright blue-white light sources cause prolonged retinal recovery times - increasingly longer with higher (average) age of the traffic participants. Stray light (much worse at the short wave end of the spectrum) is adding more undesired sequels – delayed light adaptation, incapacitating – being depicted as 'driving in a black funnel', gaze deviations (eye track studies: avoiding the annoying light or even worse, staring at it like being hypnotized), narrowing of lid fissures or closure of one (impaired stereo vision!) or both eyes provoke serious consequences. Equal distribution of attention has to be an indispensable condition and prerequisite of traffic safety for *all* traffic participants. Superfluous distracters (DRL) – 'Mixed traffic' have to be avoided by all means.

Incontrovertible evidence that Daytime Running Lights KILL

The UNECE and EU legislators have based their recommendations upon theoretical academic reports predicting a reduction in vehicle accidents. However these reports are fundamentally flawed and use meta-analysis (i.e. reports upon previous reports) to compound the errors. Crucially, only laboratory simulation using slides was utilized as a foundation for the EU-DRL regulation. The latest EU report (SWOV August 2008 factsheet) claimed a theoretical 15% less fatal accidents and 10% less injury accidents. Statistics: A prospective, randomised, placebo-controlled (!), etc. study which could yield reliable significant results is quite impossible in this field.

In reality:

- **EU:** No EU country can prove any reduction in accidents or fatalities when DRL were mandated
- **Austria:** Accidents **increased by 12.2%** - Austrian Government banned obligatory DRL Jan 2008
- **Bulgaria:** DRL used 4 months per year - accidents have **increased by 8.1%** (Appendix 1)
- **Poland:** Since DRL introduced April 2007 accidents **increased by 6.0%** (Appendix 1)
- **USA:** When DRL were introduced in 1997 by GM, accidents **increased by 3.7%** (HILDI 1997)
- **USA:** NHTSA 2008 concludes "no statistically significant associations" (from DRL)

Résumé: DRL are not justified. (Also valid for countries of extreme northern or southern latitudes)

Conclusion/Recommendation:

DRL should be banned and headlights fitted with automatic light sensors

Daytime Running Lights 'overcharge' our highly complex, sensitive and vulnerable visual and cognitive systems. DRL are at variance with sensory and neurophysiology laws.

The fatal consequences of DRL primarily affect children and vulnerable road users.

We formally ask you to rescind Daytime Running Lights UNECE regulation No 87 September 2008.

Yours sincerely,

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Epilogue:

Reflecting materials (protecting weaker traffic participants) are ineffectual under DRL-conditions. Reflectors have to be caught by the beam of headlights in order to *reflect* light and increase conspicuity. Bright daylight providing sufficient sight interdicts additional lighting and illumination. Under twilight -, dusk-, dawn-, fog-, deep shadow- etc. conditions DRL is contra-indicated, because street surface and *all* 'traffic-relevant' objects have to be illuminated under these conditions.

The temporary 'solution' using '*dipped headlights*' under daylight conditions instead of DRL causes increasingly unbearable situations: Over-use plus defective, faulty and misaligned headlamps provoking glare, cause fatal misjudgements.

Economic catastrophes necessitate austerity measures – the associated environmental pollution from DRL, headlights and surrogates is untenable. Those vehicles already using headlights etc. during daytime light conditions are causing millions of tonnes of Carbon Di-oxide to be emitted unnecessarily into the World's atmosphere. The associated DRL production, maintenance and lamp disposal (even LED's develop faults) only benefits manufacturers and service industries.

References

Inattentive blindness http://www.scholarpedia.org/article/Inattentive_blindness
Simons DJ, Rensink RA. Trends Cogn Sci. Change blindness: past, present, and future. 2005 Jan;9(1):16-20. Comment in: Trends Cogn Sci. 2005 May;9(5):218; author reply 219.
United Nation Declaration of Human Rights 1948 www.un.org/en/documents/udhr/
Highway Loss and Data Institute USA 1997 www.dadrl.org.uk/DRLstudies.html
NHTSA September 2008 The Effectiveness of Daytime Running Lights for Passenger Vehicles www.dadrl.org.uk/DRLstudies.html
Motorcycle Action Group UK - Response to the Consultation 'Saving Lives with DRL' Hardy Phd www.dadrl.org.uk/DRLstudies.html
Critique of the Methodology of IR2: DRL - How data is misused and duplicated Hardy MAG www.dadrl.org.uk/DRLstudies.html

Appendix 1 – The Evidence

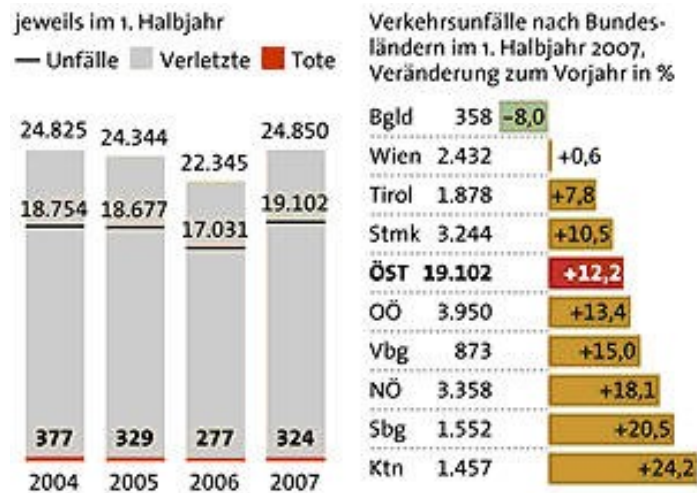
The Netherlands Research Institute SWOV issued a Factsheet Daytime Running Lights August 2008 www.swov.nl/rapport/Factsheets/UK/FS_DRL.pdf which summarised previous EU funded DRL studies.

This SWOV Factsheet claims a theoretical 15% reduction in fatal crashes and 10% reduction in injury crashes and was used to persuade the European Parliament to vote in a DRL law in September 2008.

Clearly and tragically the EU's theory that DRL save lives is flawed:

AUSTRIA:

Increase in accidents since the introduction of Lethal Daytime Running Lights:



The overall increase in accidents for Austria due to DRL is +12.2%

24,850 injured +11%
324 subjects died +17%
(OST = Osterreich)

Note:
There was a disproportionate increase in accidents to vulnerable road users since the introduction of DRL in 2007:

Children +13%
Cyclists 2,814 accidents + 43 %
Motorcyclists 1,400 accidents + 46%
Fatalities + 51%

Key
Tote = deaths
Verletzte = injuries
Unfälle = accidents

The chart side bars are Austrian states

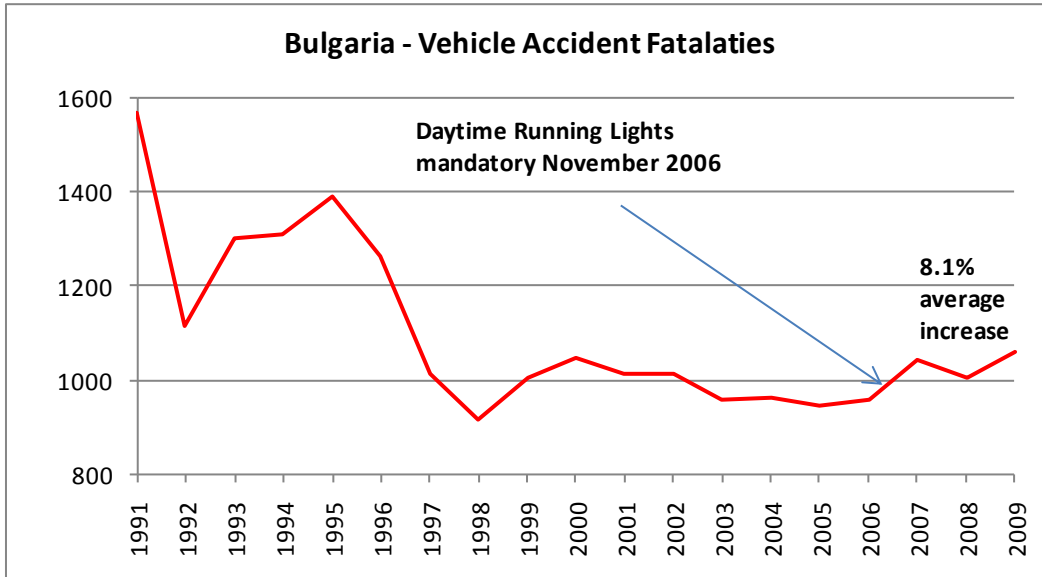
Since DRL were banned by the Austrian Parliament on 1st January 2008, fatalities have fallen by 5% and bike accidents by 25%.

This is despite many vehicles from adjacent countries e.g. Audi's and BMW's from Germany entering Austria with excessively bright DRL

All data in this Appendix is from official Government Transport Department or Police sources

BULGARIA:

Increase in accidents since the introduction of Lethal Daytime Running Lights for 4 months each year from November 2006:

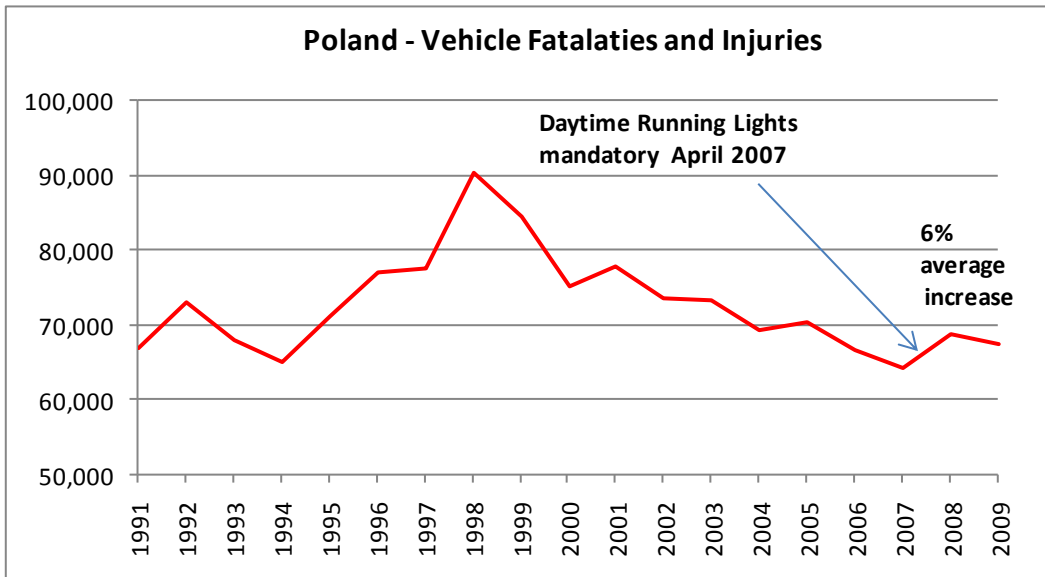


Data Source: Bulgarian Police

http://dokkpbdp.mvr.bg/NR/rdonlyres/CA8ABA4D-44B5-44A3-ACE4-05134F300D73/0/U1990_2008_bg.xls

POLAND:

Increase in accidents since the introduction of Lethal Daytime Running Lights April 17 2007



Data Source: Polish Police

www.policja.pl/porta1/pol/8/160/Wypadki_drogowe_w_latach_1985_2008.html