

**THE ROYAL SOCIETY FOR THE PREVENTION OF ACCIDENTS
RoSPA**

RESPONSE TO THE EC CONSULTATION

“SAVING LIVES WITH DAYTIME RUNNING LIGHTS (DRL)”

November 2006

Saving Lives With Daytime Running Lights (DRL)

This is the response of the Royal Society for the Prevention of Accidents (RoSPA) to the European Commission's consultation entitled "Saving Lives With Daytime Running Lights".

RoSPA welcomes the opportunity to comment on the consultation paper. As RoSPA is an accident prevention organisation, our response is mainly restricted to road safety and acceptability issues. Other issues such as finding the balance between meeting environmental and safety targets and concerns also need to be carefully considered.

The theory behind DRL is that they increase the conspicuity of their user, and this leads to a reduction in accident risk, and therefore the number of accidents.

There is now a large body of independent research that indicates a potential effectiveness of DRL, and this evidence cannot be ignored or discounted

RoSPA recognises that Daytime Running Lights (DRL) may be a method of reducing the number of casualties on the roads of Europe and the UK, provided that a practical method of implementation can be identified, and that they do not increase the risk for some groups of road users.

We do not currently have available all of the evidence and research that is required to answer several questions about the effective introduction of DRL.

In the EC consultation document, 5 options for implementing DRL are presented, and these are referred to in RoSPA's response;

- 1) *The use of DRL is required on all motor vehicles from a certain date.*
- 2) *The use of DRL is required on all motor vehicles from a certain date. In addition, new motor vehicles will be required to have an automatic switching-on of dipped beam headlights.*
- 3) *The use of DRL is required on all motor vehicles from a certain date. In addition, new cars sold after the same date will be required to have dedicated DRL that are switched on automatically.*
- 4) *New cars sold after a certain date are required to have an automatic switching-on of dipped beam headlights. Cars that do not have automatic DRL will not be required to turn on low beam headlights.*
- 5) *New cars sold after a certain date are required to have dedicated DRL that are turned on automatically. Cars that do not have dedicated DRL will not be required to turn on their dipped beams.*

Specific Questions

1. Is the approach of a technical requirement to equip all vehicles with automatic dedicated daytime running lights, coupled with a user requirement to use dipped beam headlights or retrofitted dedicated DRL the correct one, or should other alternatives be considered?

RoSPA Response:

The solution with the greatest benefit to cost ratio (option 1, behavioral measure) would be the most rational to implement, but there may be problems with the acceptability and enforcement, when taking a solely behavioral approach. Safety is a social judgment as well as a technical one, and social judgment will differ due to the different cultures in EU countries, a balance must therefore be found.

The most socially acceptable would be option 5, requiring all new models of vehicles to have an automatic dedicated DRL after a certain date. This solution would require no further public input other than waiting for cars with DRL to become available. Option 5 has the least environmental impact, and there will be little concern from drivers over changes to the law. However, the benefit to cost ratio is much lower, as are the potential casualty savings.

The time it would take a large number of vehicles with dedicated DRL to be on the road would, of course, be dictated by the ability of the automotive industry to fit automatic dedicated DRL into new models.

There may also be a potential increase in accident risk for cars without DRL during the 'phasing in' period. The potential impacts of this would need to be carefully studied before a decision to implement DRL is made, as there is still much debate as to the extent of this risk.

A logical step is to find a balance between the two – which would be option 3. This would require the automatic fitting of dedicated DRL by the automotive industry, and then require drivers without DRL to use dipped beam after a certain date. This may be a good compromise, although there are clear practical issues with requiring a behavioral change.

Study would need to be conducted into how the behavioral change is effected. Would the use of low beam headlights on non-DRL cars be made compulsory by law? This brings up the question about how well the law could be enforced as it may not be possible to make the assumption that the law will be self enforcing – again, due to social acceptability issues.

Certainly RoSPA would like to see police enforcement of road traffic law focused on serious road safety issues, and these are currently known through objective research. The benefits of enforcing mandatory DRL use would be much less than enforcing existing traffic laws such as the drink/drive limit, seat belt use, speeding, and of course catching those who drive in a dangerous manner.

An engineering requirement to retrofit automatic DRL would not be a pragmatic solution. It is difficult to see how this would be practical.

The other alternative would be to encourage the use of low beam lights through education and publicity measures instead. Again, how would this change the usage rates and affect the accident risk to road users who choose not to use DRL?

There is also the concern that many drivers in the UK perceive that other cars with lights on are behaving aggressively. This is a potential behavioural response to DRL, which should be investigated.

The emergency services have also raised concerns that DRL may hinder emergency vehicles wishing to negotiate traffic by reducing the effectiveness of warning lights.

Once again, dedicated analysis is required on the topic to ensure that the benefits of implementing DRL would not have unpredicted adverse effects. Ways of reducing any adverse effects must be identified and employed if DRL are to be introduced effectively.

RoSPA would therefore support option 5 as the most acceptable and pragmatic, although if realistic answers can be found to the practical issues of option 3 then this would be preferable.

2. Should there be specific rules concerning motorcycles, e.g. a different colour of light for them?

RoSPA Response:

Although Daytime Running Lights will bring a net benefit, there is the risk that the safety of some road users may be compromised.

Motorcyclists already use DRL as a way of making themselves more conspicuous in a traffic scene. If every vehicle were to use DRL, then motorcyclists may lose this conspicuity from the background.

The concern that motorcyclists may become less conspicuous once DRL are fitted to motorcars is genuine, and must be considered as part of an effective implementation scenario.

Although it may make it easier for motorcyclists to spot cars, enabling them to plan an 'escape route' to prevent an accident if the car were to pull out, it does not address the issue of drivers making poor or incomplete observations.

This is a serious safety concern as 'looked but failing to see' errors contribute to up to 23% of unimpaired drivers' accidents during daylight¹, and a more recent report identified that 32% of all accidents were caused when road users 'failed to look properly'².

This would indicate that a countermeasure is required in order to prevent motorcyclists from losing their current safety benefits from DRL.

The key point to make in response in this question is that potential solutions should only be seen as hypotheses at this stage. Suggestions will need to be rigorously

¹ Brown, ID (2002). A review of the 'looked but failed to see' accident causation factor. In Behavioural Research In Road Safety: Eleventh Seminar Proceedings, London: DTLR.

² David Robinson and Richard Campbell (2006), Contributory factors to road accidents, Transport Statistics: Road Safety, Department for Transport.

tested in a scientific manner that allows comparison, and an analysis of their effect in the real world. This will highlight the best way for motorcyclists, and indeed other vulnerable road users, to remain conspicuous once DRL is made mandatory.

In lieu of objective evidence on this issue, a proven solution cannot be identified.

3. Do you have any other comments or questions?

RoSPA Response:

A practical and acceptable solution to the use of DRL would not have a significant impact on the UK's contribution to the EC's 2010 casualty reduction targets. This may well also be the case with several larger member states who have no current legislation or plans for DRL use - such as France and Germany. This is due to similar concerns about the actual effectiveness, practical issues that would need to be resolved, and environmental impact.

Serious effort and direction needs to be put into the prioritisation of future safety technologies at a European level, and in future, focus should be put on the most effective. What systematic estimates have taken place on the safety benefits of future safety technologies – such as those within the eSafety initiative?

There is now a large body of evidence that shows the dangers of excessive and inappropriate speed, and that improving adherence to the speed limits will have a significant safety benefit.

RoSPA, therefore, believes that Intelligent Speed Adaptation will be a highly effective technology in future to reduce the number of deaths and serious injuries on Europe's roads post-2010. This benefit has been shown by research that has been performed on ISA throughout Europe.

Recent publications by PROSPER proposed a series of conclusions and recommendation, which gives a potential way forward for Europe on implementing ISA³.

It would be exceptionally valuable to follow these recommendations on the technical implementation of ISA soon as it is possible. This should then be used to create a working road map forward that should be followed to ensure that the technology is not delayed.

Improving the level of pedestrian safety of vehicles is also a key issue in future, and also has a relatively high benefit to cost ratio.

³ <http://www.prosper-eu.nl>

Conclusion

There is now a large amount of research available that makes a strong argument for the safety benefits of Daytime Running Lights. However, RoSPA does not believe that we are in a position to introduce their widespread use across the EU without more detailed research about how to minimise the risks to vulnerable road users or further consideration of the most practical and acceptable way to implement them.

All of the options still leave unanswered questions, presented in this response, which would require much more intricate plans than those presented in the consultation document. The most pragmatic method to introduce DRL would be option 5, unless effective solutions could be found to the practical issues around option 3, which requires measures to change road users' behaviors.

There is still concern over an increased risk to vulnerable road users, such as motorcyclists, which has not been effectively addressed.

It is unlikely that a pragmatic solution would have a significant effect on the 2010 targets.

Focus and direction needs to be given to technologies that will have the largest impact on road safety. RoSPA believes, based on research, that of all these technologies, Intelligent Speed Adaptation is the most significant and further resources need to be given towards facilitating its swift implementation. Pedestrian Protection is also a key area for focus in the immediate future.

RoSPA thanks the EC for the opportunity to comment on this consultation. We have no objection to the contents of RoSPA's response being reproduced or attributed.

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