



## **Submission on Vehicle Lighting Rule – Yellow Draft (Dec 2003)**

### **Introduction**

The Cycling Advocates Network (CAN) is pleased to present this submission on the above document. The national committee of the group has prepared this submission, with feedback from CAN members. CAN has based its submission on reviews of the relevant overview document and the yellow draft of the rule, as well as our previous submission on the red draft, and our submission on the yellow draft of the Road User Rule. If you require any clarification of the points raised by us, please feel free to contact us as detailed below.

### **1. General Comments**

CAN agrees with the proposed approach of separating out the 'technical' and 'operational' lighting requirements, and dealing with the former in the Vehicle Lighting Rule and the latter in the Road User Rule.

### **2. Proposed wording for the draft Road User Rule**

As it is now proposed to cover the operational requirements of vehicle lighting in the Road User Rule, we take this opportunity to comment on the proposed wording given in the overview of the Vehicle Lighting Rule.

#### **Section 11.13      Bike lights**

Both subclauses are supported by CAN. Note that in the case of subclause (1), this is a change compared to our previous submission on the yellow draft of the Road User Rule.

### **3. Proposed wording for the draft Land Transport Rule: Vehicle Lighting**

#### **Section 3.3            Fitting and performance requirements for headlamps**

**Subclause (2) (a)** - change to read "may be fitted with one or more headlamps; and" (change underlined)

*Explanation: We don't see the need to restrict cyclists to two headlamps only. If cyclists were to choose more than two headlamps to increase other road users' ability to see them, this should be beneficial to road safety. We note that Section 7.3(2)(a) correspondingly allows the use of one or more rearward-facing position lamps (and not one or two).*

**Subclause (2) (b)** - change to read "when operated during the hours of darkness, must be fitted with one or more headlamps that emit light that is visible from a distance of 100 m." (change underlined)

**Subclause (3)** - completely revise to read, "Any headlamp of a vehicle in 3.3(2) may emit a steady beam or a flashing beam. A frequency of no less than 1 Hz is required for a flashing beam."

*Explanation: We have previously submitted on the issue of flashing headlamps for cycles on the red draft of the Vehicle Lighting Rule and the yellow draft of the Road User Rule, pointing out that most cycles of class A will only ever be operated on streets that are lit during darkness with the purpose of the headlamp being that other road users notice the cycle, rather than to illuminate the road ahead of the cyclist. The requirements for cycle headlamps and (rear) position lamps are therefore similar and we note that it is legal to operate flashing position lamps on bicycles. We therefore suggest that it should be made legal to operate flashing headlamps.*

*We would like to point out that most cyclists already operate flashing headlamps, which is against the law at present. Headlamps operated in a flashing mode save battery power and are thus a more economical option.*

*We have conducted tests in a poorly lit street, where an observer was positioned approximately 100 m away from a person operating different battery powered cycle headlamps. We chose a poorly lit street as in this type of environment, cyclists are most likely be seen due to the lights fitted to their cycles, rather than by being illuminated by the street lighting. We concluded that a flashing headlamp could be noticed far easier by an observer than the same lamp emitting a steady beam. It will thus be beneficial to road safety to allow the operation of cycle headlamps emitting a flashing light.*

*We support the proposal to allow more than one headlamp, but we are opposed to prescribing that at least one lamp must be operated in a steady mode. Conversely, prescribing the operation of flashing headlamps cannot be done either, as not all headlamps are able to emit a flashing beam. It should be left to the individual cyclists how they want to operate their headlamp.*

*In the development of Rules, reference is often made to other jurisdictions of relevance to NZ, where we consider adopting their regulations and practices. In this circumstance we note that flashing headlamps are permitted in Queensland (Transport Operations Regulation 1999, s259).*

*We consider it useful to specify performance parameters for the flashing mode of bicycle headlamps. This could be done by setting a minimum frequency<sup>1</sup>, or by specifying a minimum proportion of time during which the headlamp is illuminated. The aim should be that the 'off-periods' of the flashing mode are restricted so that other road users can easily detect cyclists. For example, a short flash followed by a 5 sec 'off-period' would definitely not be a safe operation of a bicycle headlamp.*

---

<sup>1</sup> Note that the above frequency is merely a suggestion that is not based on any evidence. The purpose of mentioning a frequency is to highlight that this issue has not been included in the draft legislation as yet. We are not aware of overseas guidelines and would like to leave it up to LTSA to research best international practice.

*To summarise this issue, we submit that operating flashing headlamps should be allowed for in the Rule, as it represents common road user behaviour, is more economical to operate, increases cyclists' safety, and is legal in Queensland. In addition, we suggest specifying performance parameters.*

## 4. Other Vehicle Lighting Issues

### 4.1. Temporary Bicycle Lamps

Many battery powered bicycle lamps can easily be removed from a bike, and cyclists often take the lamps off to prevent theft. Some cyclists may not carry the lamps with them if they don't intend to ride at night. Under the current proposal, it is legal not to have lamps fitted on bicycles during the day. Any further changes to the rules should ensure that it stays legal to operate bicycles during the day without having lamps fitted.

### 4.2. Helmet-mounted Lamps

Over the last few years, night riding has become popular in mountain-biking circles. Powerful halogen lights are mounted onto helmets (see Figure 1), so that the riders can illuminate the track ahead by turning their head. These halogen-mounted lamps have now also become popular with commuter cyclists, especially during the winter months. Because they are much more powerful than normal headlamps, these helmet-mounted lamps are generally the only headlamp used.



Figure 1: Helmet-mounted lamp

It is not clear to us whether the proposed Vehicle Lighting Rule allows for these helmet-mounted lamps. Potential problems could be lamp mounting height, the lamp not mounted onto the vehicle, a white beam (temporarily) emitted rearwards if a riders looks over their shoulder, horizontal orientation of a headlamp possibly not complying with Section 3.2(4) etc. We suggest that the Rules should definitely allow for these lamps, as they have a much higher light output and should thus increase cyclists' safety, and seek clarification on this issue. We submit that it should be legal to operate helmet-mounted lamps only, i.e. not requiring further headlamps (fitted to a bicycle) in addition to helmet-mounted lamps.

**Axel Wilke**

Technical Advisor  
for CAN

PO Box 6491; Wellesley St; Auckland

E-mail: [secretary@can.org.nz](mailto:secretary@can.org.nz)

Website: [www.can.org.nz](http://www.can.org.nz)

The Cycling Advocates' Network of NZ (CAN) Inc is this country's national network of cycling advocate groups. It is a voice for all cyclists - recreational, commuter and touring. We work with central government and local authorities, on behalf of cyclists, for a better cycling environment. We have affiliated groups and individual members throughout the country, and links with overseas cycling organisations. In addition, several national/regional/local government authorities, transportation consultancies, and cycle industry businesses are supporting organisations.