

Transmitted by the expert from  
Germany

Informal document No. GRE-62-37  
(62nd GRE, 6 – 9 October 2009,  
agenda item 4(c))

## **Agenda item 4(c)**

Regulation No. 48 (Installation of lighting and light – signalling devices)

Clarifications on installation requirements

# Paragraph 6.21

## CONSPICUITY MARKINGS

Basic document TRANS/WP.29/GRE/2009/69

Content

Objectives of this proposal

General Problems

Detailed Questions

**The European Directive for  
the Whole Vehicle Type Approval (WVTA)  
is intended to extend the application to  
all categories of vehicles, and also  
to single vehicle approval.**

**That means:**

**All vehicles which were been excluded before  
or which are seen as matter for the national authorities,  
shall now meet all technical requirements  
as requested by the WVTA!**



**As from 10 July 2011,**

EU Member States will issue certificates of conformity for new vehicles regarding lighting installation

**only if the vehicle complies with Regulation No. 48**

In addition, such requirements may also be introduced by other Contracting Parties.

**To make it clear**

**The proposal of Germany do not tough vehicles which could at which the installation is possible without any problem or which could be constructed or designed in such a way that it makes no problem.**



**No carte blanche**



The proposal appears not to such vehicles! ...



**The majority of the vehicles which are covered by paragraph 6.21 in R 48 have no problems to fulfil these requirements!**



**This proposal is intended to solve problems for vehicles for which**

**it is impossible, due to the**

- shape,**
  - structure,**
  - design or**
  - operational requirements**
- } Required or caused  
by the use and/or operational necessities!!**

**of the vehicle, to comply with all or part of the requirements**

# Similar situation ...

## under run protection!

e.g. Directive 2000/40/EC

- 1.3. The requirements of this Directive do not apply to:
  - 1.3.1. off-road vehicles of categories N2 and N3;
  - 1.3.2. **vehicles such that their use is incompatible with the provisions** of front under run protection.

Or

e.g. ECE-R 73

Paragraph 8 **Derogations**



**Dispute between the question**

**“impossible” or “impractical”**

**And**

**“bad engineering”**

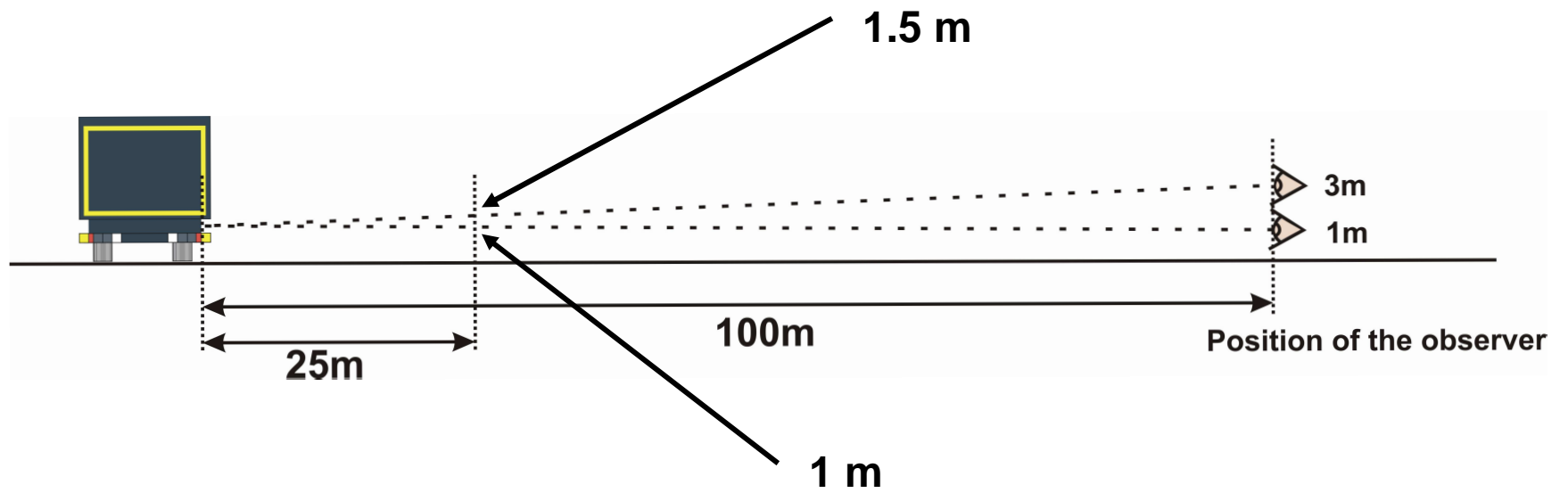


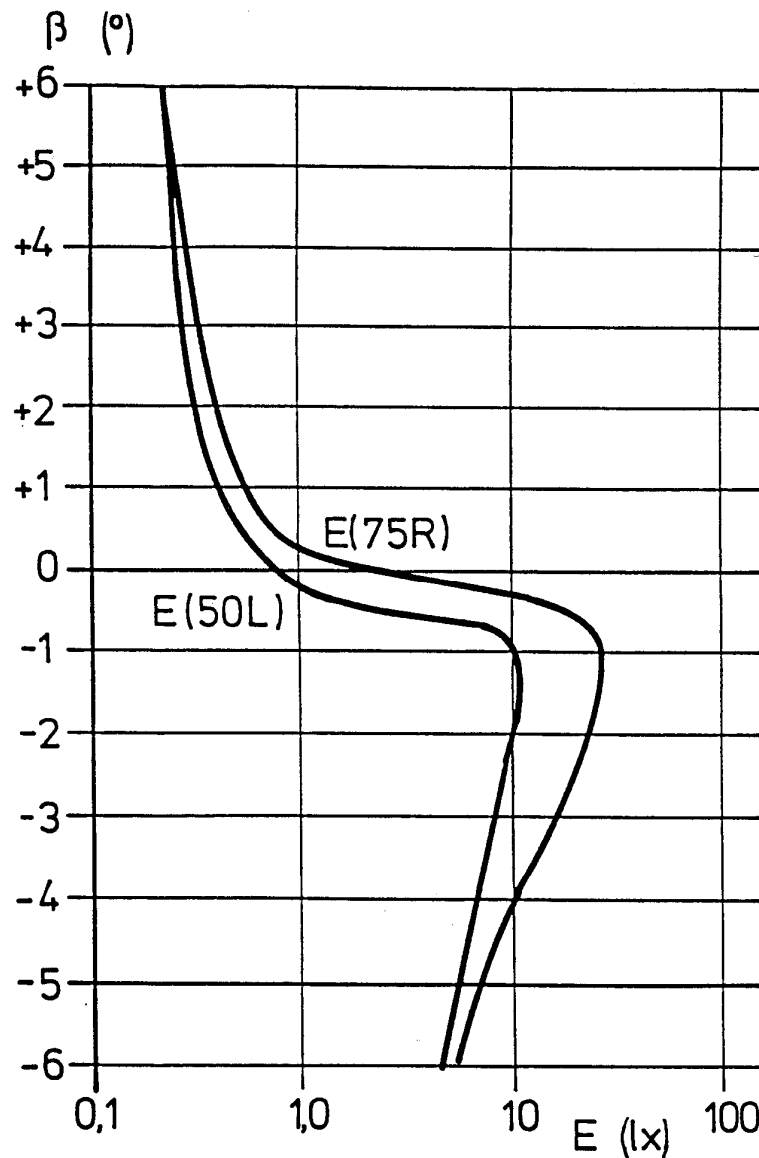
# Question

**100 m**

Conspicuity Marking is a device intended to increase the conspicuity of a Vehicle in a far distance of more than 100m.





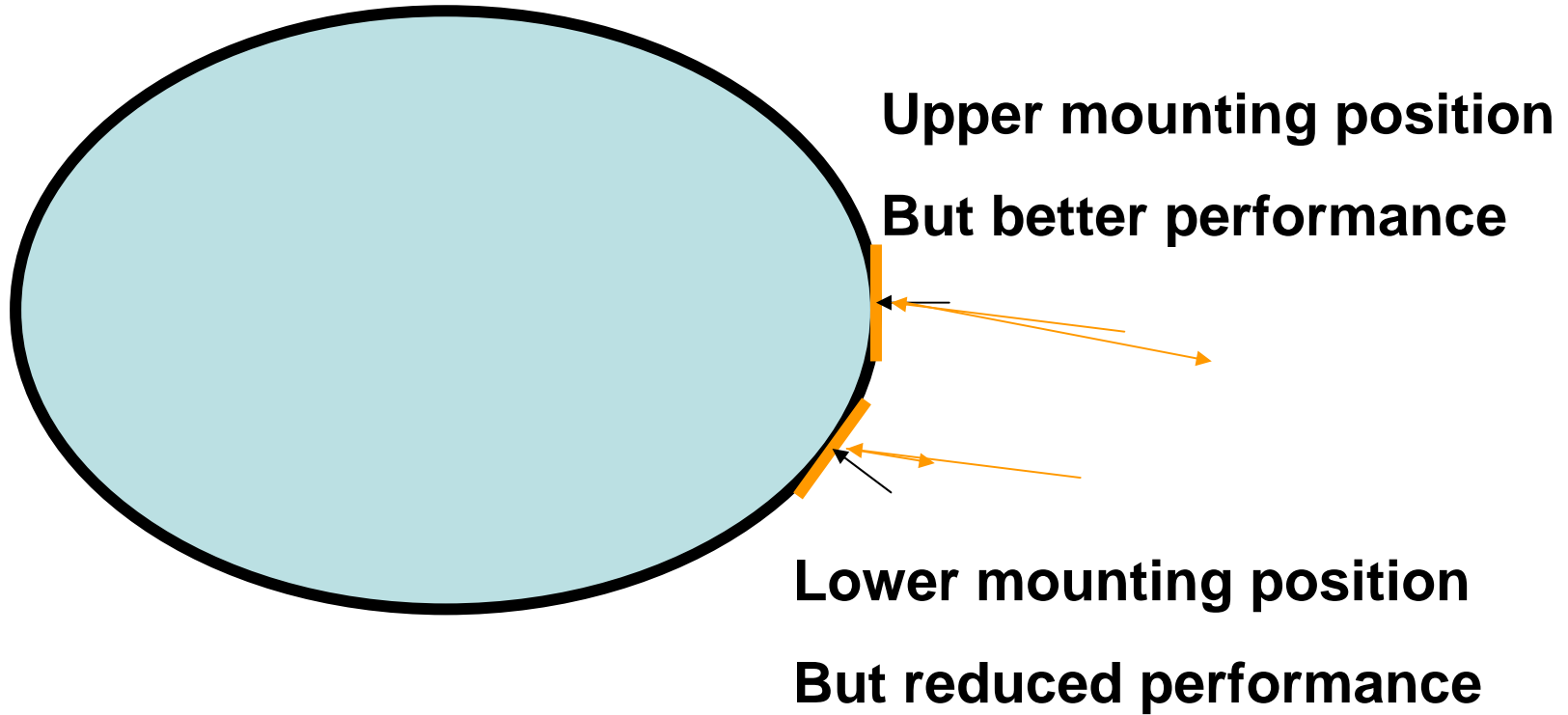


Characteristic light distribution of a low beam lamp projected on a screen at 25 m with vertical cuts through the ECE measuring point B50L and E50L shown as E (50L) and the ECE measuring point 75R shown as E (75R) as defined e.g. in the ECE-Regulation 112.

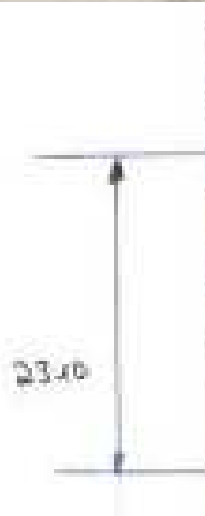
# Question

# Mounting Height





If possible,  
other mounting positions must be determined for **the specific material** by  
additional tests!



2310mm

# Question

## Non flat surfaces

## Non flat surfaces ...



If possible,

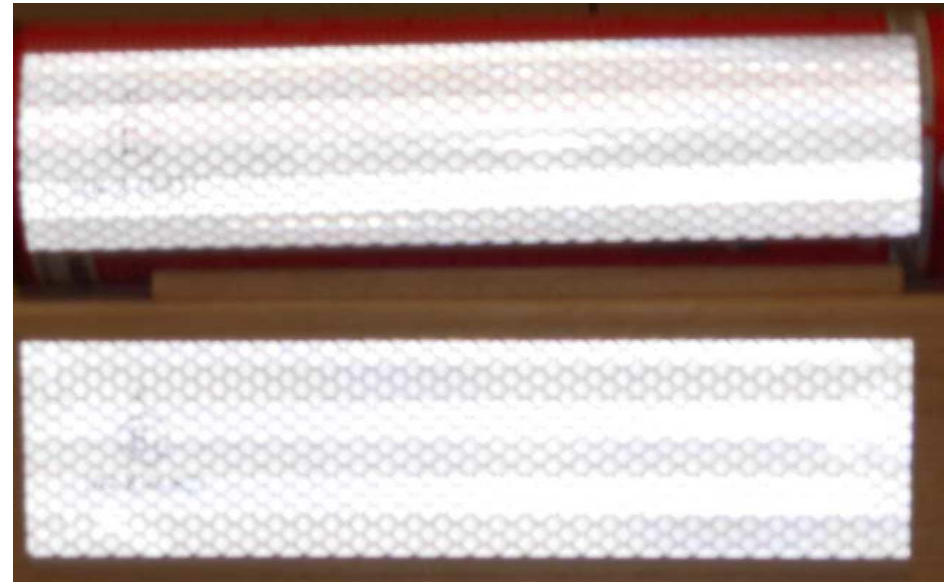
the mounting on a non flat surface must be determined for **the specific material** by additional tests!



Simple demonstration ...

Non flat surfaces

...



# Question

**Flexible materials ↔ tarpaulins**



# Durability

Statement of materials manufacturer:

The warranty for materials on rigid parts is nearly three times longer than for materials on flexible surfaces!



## Customs Requirements ....

But also some vehicles are completely covered by tarpaulins and curtains ...





# Question

## Difficult vehicles ...





# Question

# Problems in practise ...







**The rear part inclusive the rear under run protection device is completely in the mud!**  
**Retro-reflective marking material will be destroyed!**



# Question

## High temperature ...

Vehicles for the transport of substances with high temperature, e.g. bitumen







Heater!  
Range 100° to 300°

# Question

## Alternative retro –reflectors ..









# Question

## ECE – R 70 plates ...





Alternative application of Regulation 70 plates

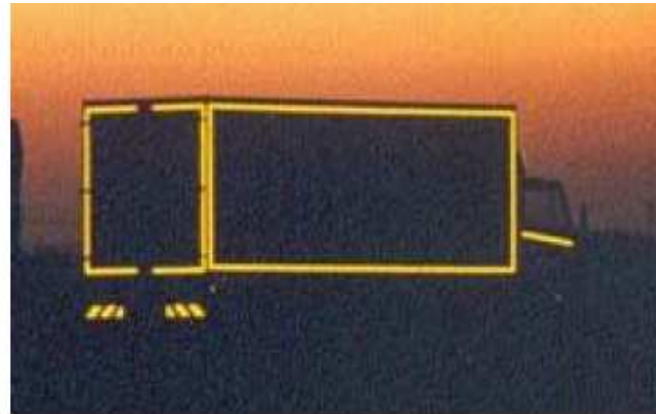


## Alternative application of Regulation 70 plates





# Following the contour ....





**Possible conflicts  
with national requirements  
for municipal vehicles must  
be solved national!**

**Question**

**Load**











**Problems with exchangeable container systems:  
When the load is on the vehicle,  
the markings are mostly obscured!**

**Thank you very much  
For  
your attention and your patience**

