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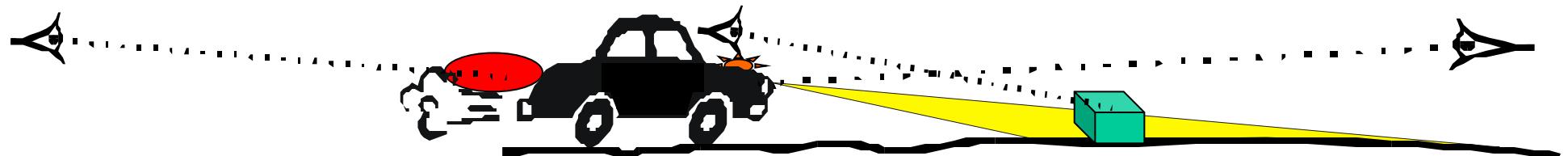
Transmitted by the expert from GTB

Informal Document No. GRE-68-40  
(68th GRE, 16-18 October 2012,  
agenda item 4 (b))

# GTB TASK FORCE “COORDINATION of AUTOMOTIVE VISIBILITY and GLARE STUDIES (TF CAVGS)”

Status Update

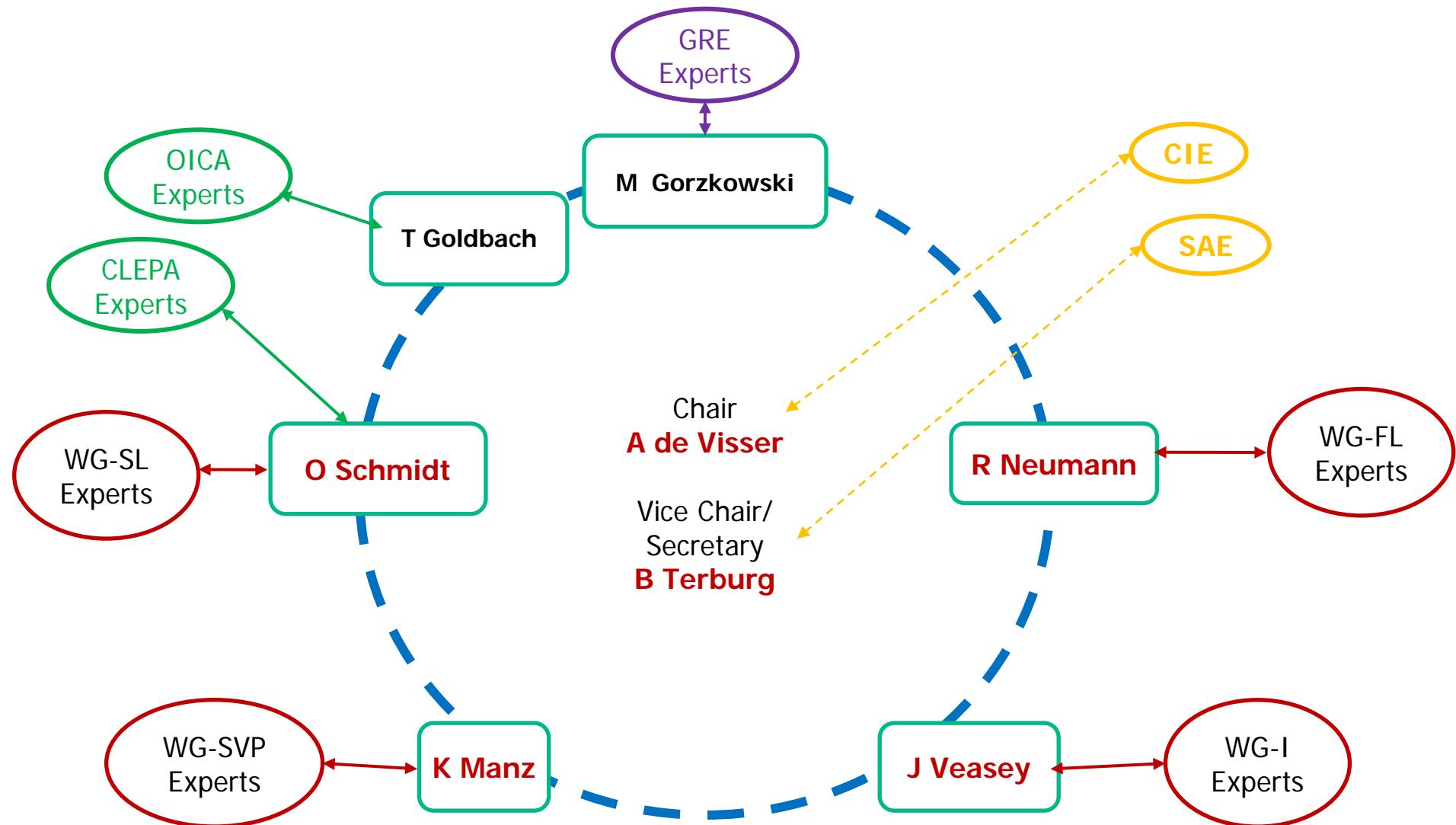
Presented to GRE68 – October 2012



# Agenda

- Introduction
- Outcome of Klettwitz Test – Dr. R. Neumann
- Introduction to Literature Study – Dr. K. Manz
- TF CAVGS Focus Area
- Identification of Relevant Parameters
- Next steps
- Questions and Answers

# Introduction – The GTB CAVGS Task Force



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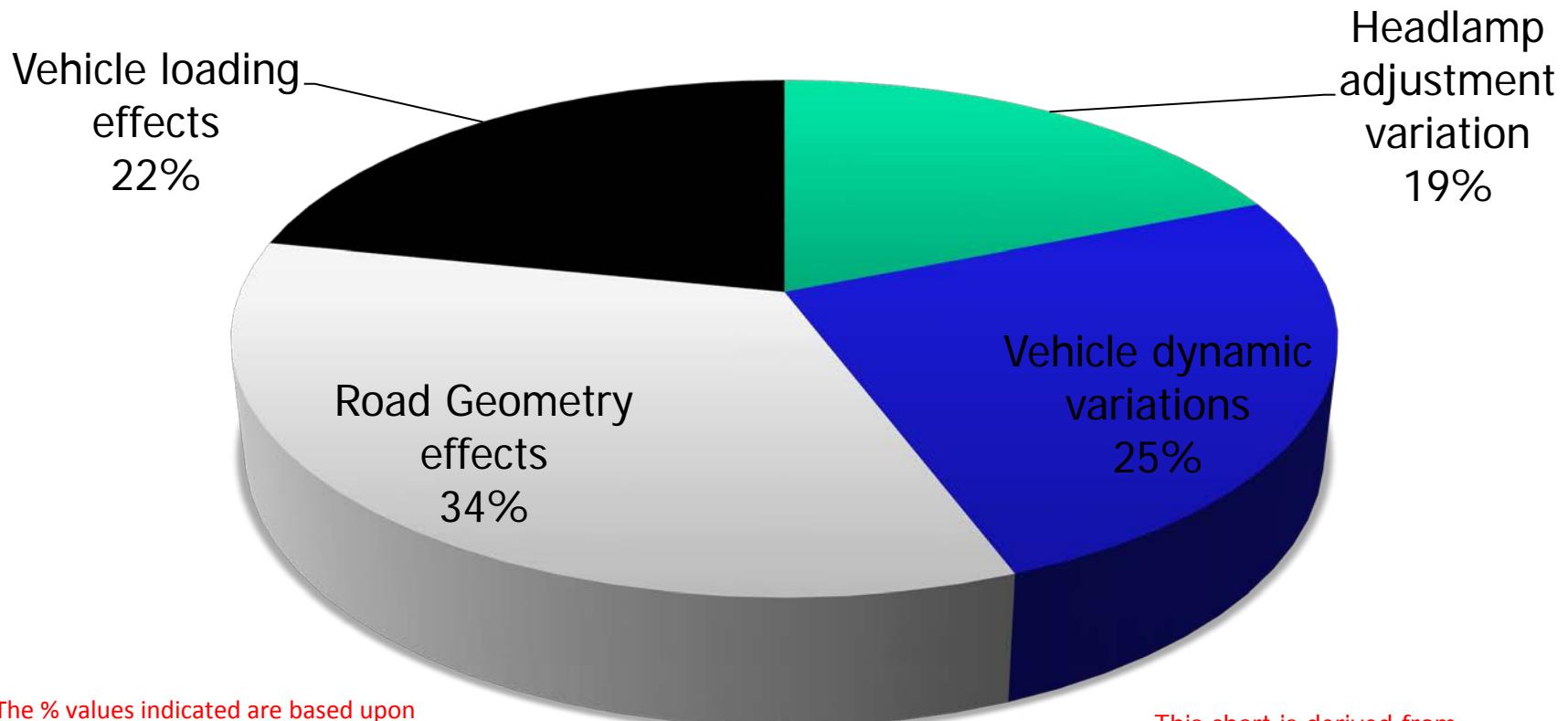
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# Contribution of the Influencing Factors to Glare

**Upward “Misaim” (degrees) that can Contribute to Glare Complaints**  
Estimate based upon normal statistical probability distribution for 98% of cases

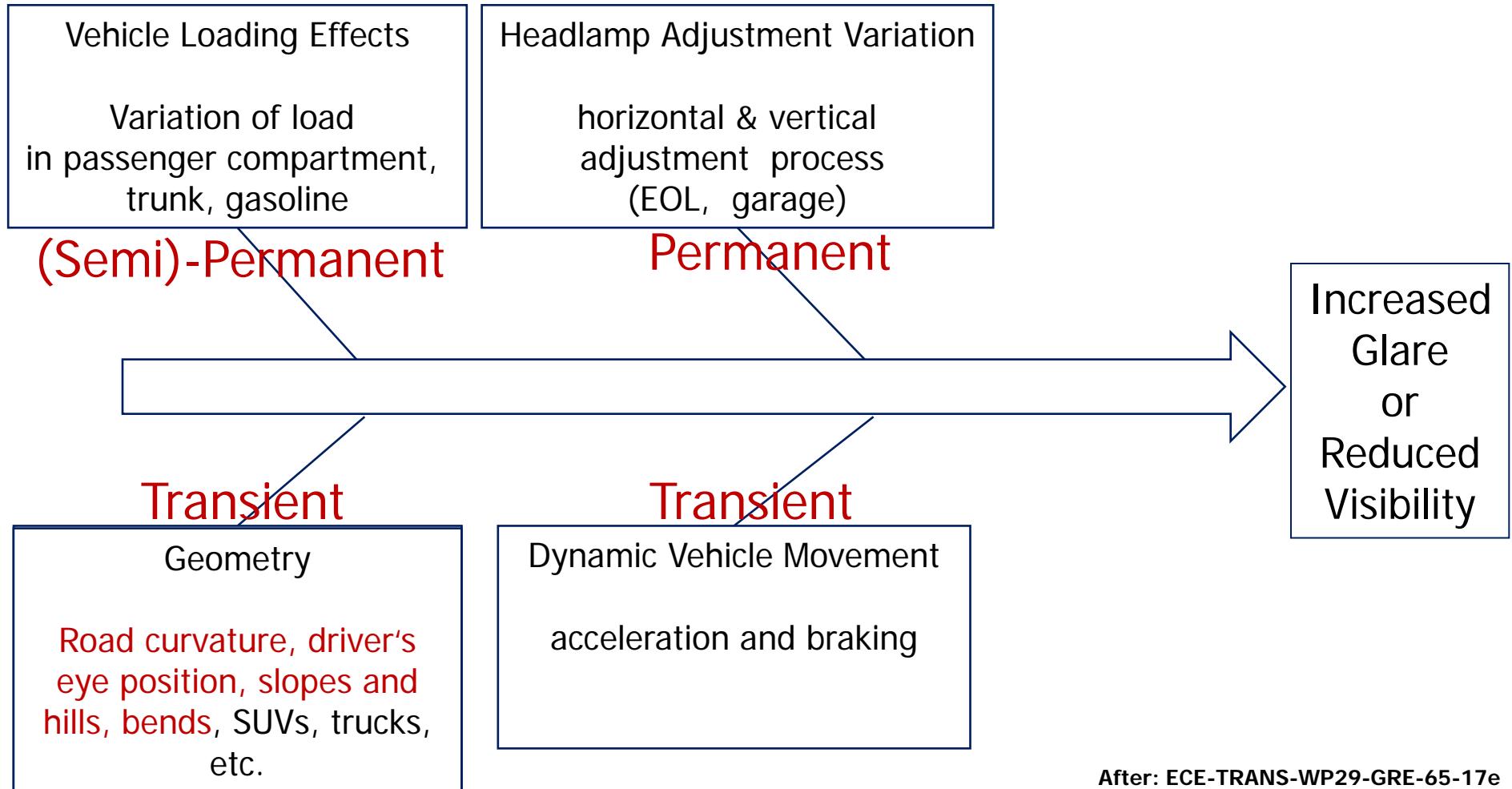


The % values indicated are based upon the statistical addition of the maximum angular effects of the individual influencing factors

This chart is derived from assumptions based upon the content of the GTB document GTBWGFL174

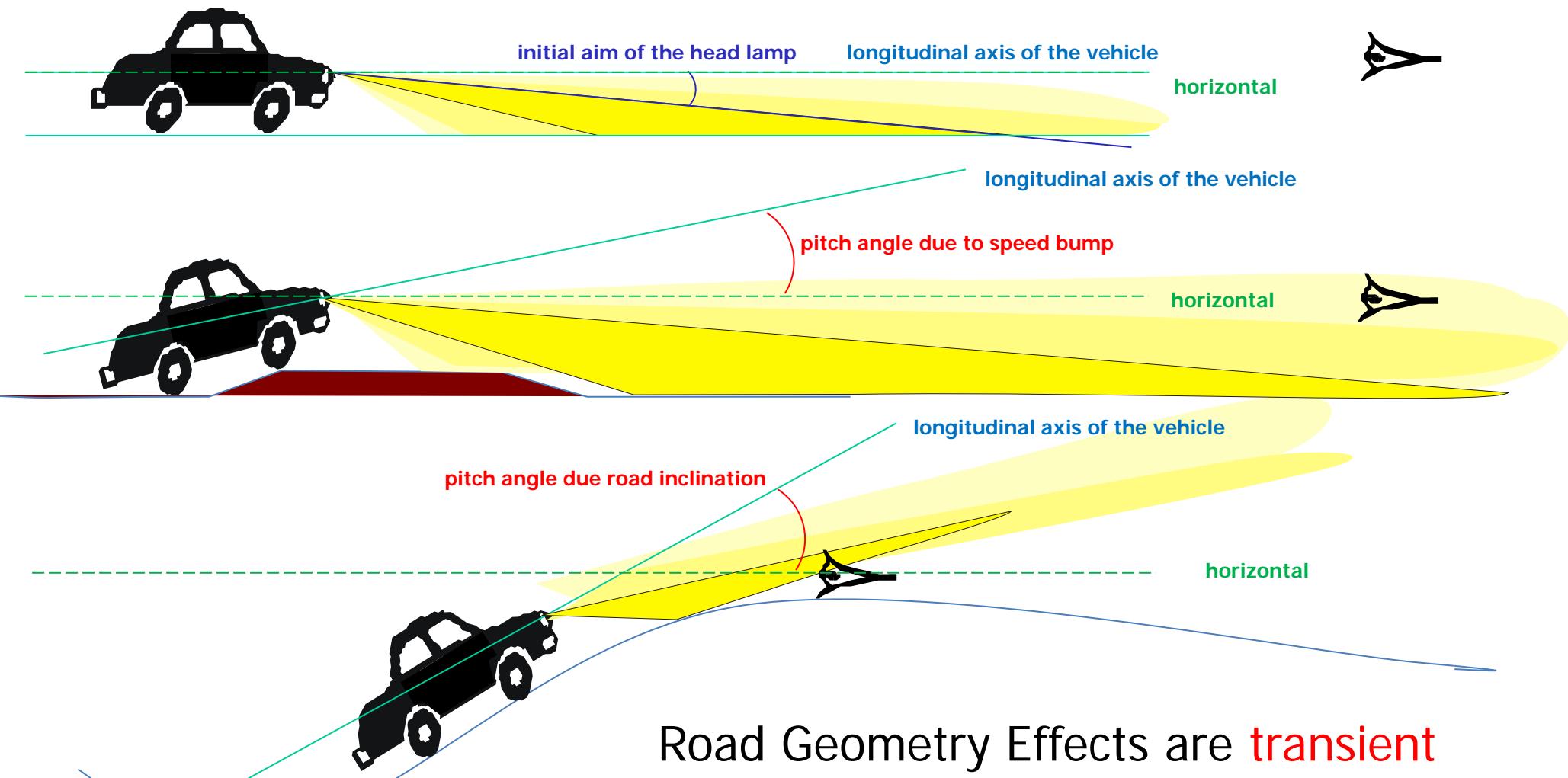
From: ECE-TRANS-WP29-GRE-65-17e

# Factors Influencing Passing Beam Misaim resulting in Increased Glare or Reduced Forward Visibility



After: ECE-TRANS-WP29-GRE-65-17e

# Road Geometry Effects



Road Geometry Effects are **transient**  
Outside scope of this investigation

# Pitch due to Load



initial aim of the head lamp

longitudinal axis of the vehicle

horizontal



initial aim of the head lamp

longitudinal axis of the vehicle

pitch angle due to load

horizontal



initial aim of the head lamp

longitudinal axis of the vehicle

pitch angle due to load

horizontal

corrected aim of the head lamp (levelling)



Load Effects are (semi)-permanent  
In scope of this investigation

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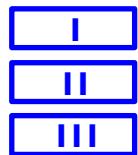
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# Identification of Relevant Parameters

## TF CAVGS Activity

- Analysis and Grouping of Contributing Factors
- Generate a Check list for Investigations

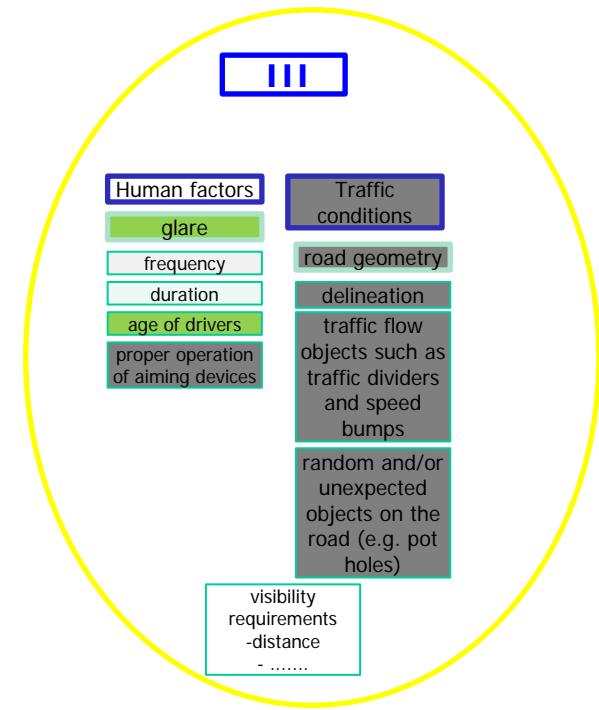
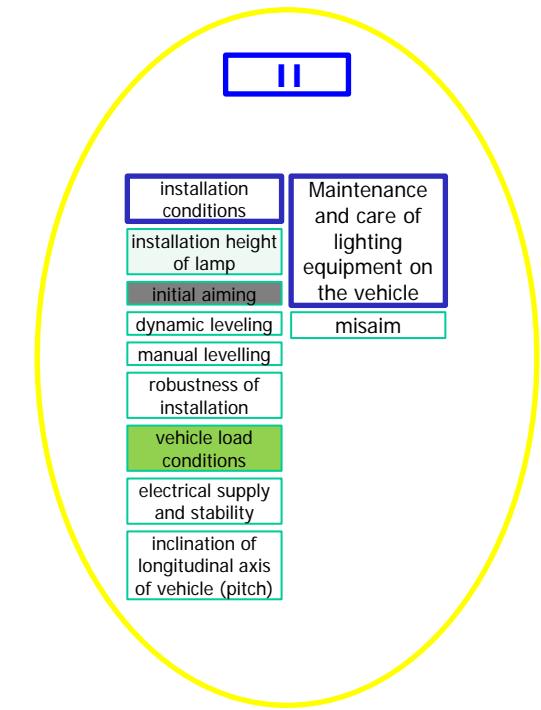
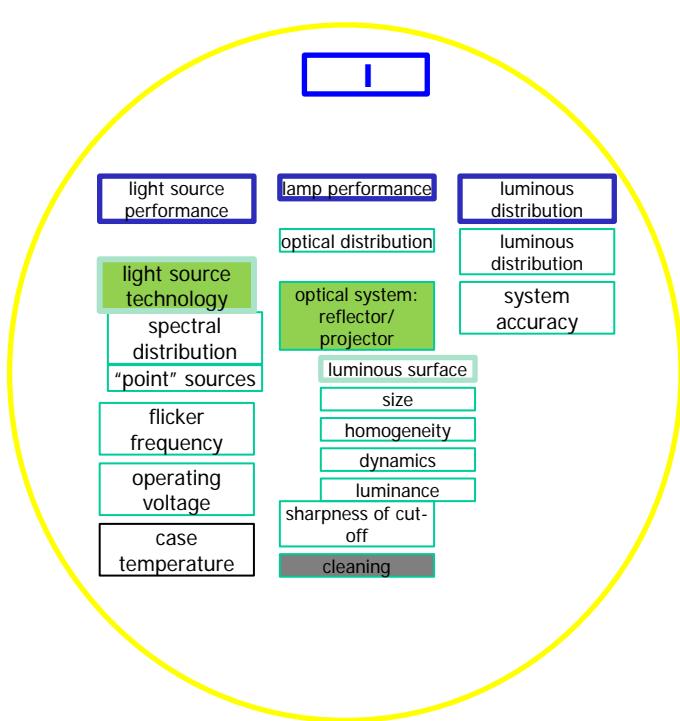
# Grouping of Related Parameters



Headlamp Performance

Installation on Vehicle

Vehicle on the Road



Klettwitz test

variation
kept constant more or less
kept constant

Can serve as Check List for Investigations

GTB

The International Automotive Lighting  
and Light Signalling Expert Group

Groupe de Travail "Bruxelles 1952"

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# Next Steps

- Further Analysis of Klettwitz Data
- Further work out Literature Review

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# Questions and Answers

We would appreciate your feedback and guidance

# *Thank you for your attention*

For more information  
[www.gtb-lighting.org/VGS/indexVGS.htm](http://www.gtb-lighting.org/VGS/indexVGS.htm)