DVN Glare Forum

Welcome Speech

Paul-Henri MATHA

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Topic to address

- Is glare a concern ? Do we have a new glare problem?
- Where does the glare come from ?
- Ideas for reducing glare through technology and future regulation

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DVN Introduction

- Neutral company who gather automotive lighting community
- Technical information
- Regulation summary
- Event organisation
- Weekly newsletter

DVN is a reference in the world of Lighting, Interior comfort, and Lidar.

15 Years
Founded by Hector Fratty, former Valeo Lighting Systems' chief of R&D.

240 Customers worldwide
240 Global Carmakers, Tier1 & Tier2 joined the DVN Community.
3 800 Linkedin followers.
500 WeChat members.

25 Experts
DVN experts are former R&D Directors from Audi, BMW, Stellantis, Valeo, Marelli, Forvia, Lumileds.

180 Monthly reports
Over 7,500 articles news published on DVN Newsletters focused on the last automotive technologies and innovation.
1 Technological Study published per year since 2018.

28 Workshops
DVN organize 5 workshops per year:
- 4 DVN Lighting Workshops across the world,
- 1 DVN Interior Workshop,
- 1 LIDAR Conference.

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Agenda

- **1:30pm to 3:30pm** : Lectures from NGO, universities, lighting experts
  - ADAC : Burkhard Boettcher
  - DVR : Barend Hauwetter, *"Glare with a road Safety Perspective"*
  - GTB : Davide Puglisi, Secretary of GRE-TF Glare
  - TUD : Michael Hamm, *"Vehicle- and Street-geometry based glare contributors"*
  - L-LAB : NIEDLING Mathias
  - **Q&A and round table**

- **3:30pm to 4pm** : coffee break

- **4pm to 6pm** : Lectures from NGO, universities, lighting experts
  - GTB : Rainer Neuman, WG-SVP Chair
  - VUB : Valéry Ann JACOBS
  - Marelli : Ernst-Olaf Rosenhahn
  - TUD : Markus Peier : *"Discomfort of bright DRL in the transition phase - results of a field test experiment and interpretation"*
  - Tomas Targosinski : *"The impact of the current official regulatory system on glare in real road traffic".*
  - **Q&A and round table**

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Motivation for the workshop

- Automotive lighting Glare topic raised by ADAC and FIA in UNECE GRE in April 2024
- RAC (UK) calls for action in January 2024

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FIA

- ▪ 71 % of the respondents find the glare unbearable or annoying
- ▪ 32 % almost always or regularly feel dazzled
- Low beam, high beam, stop lamp, rear fog, brake light, Daytime Running Lamps
- PowerPoint Presentation
- GRE-90-20e-reduced.pdf

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FEDERATION INTERNATIONALE DE L'AUTOMOBILE

BURKHARD BOETTCHER
THURSDAY, 02 MAY 2024

EUROPEAN SURVEY GLARE ON ROAD TRAFFIC

3 out of 4 of the respondents believe that glare prevention should be better regulated

Which individual light sources from other vehicles dazzle you when driving? (multiple answers allowed)	% ADAC (Germany)	% ÖAMTC (Austria)	% TCS (Switzerland)	% TCB (Belgium)	% ACL (Luxembourg) (not representative)	% Ø D/A/CH/B
Low beam	41	36	39	28	39	36
High beam (also adaptive)	82	89	74	77	75	81
Daytime running light	7	7	9	9	9	8
Brake light	9	6	8	7	9	7
Rear light	6	4	4	3	3	4
Direction indicator	2	1	2	3	2	2
Rear fog light	27	31	30	21	58	27
Blue light from emergency vehicles	9	8	8	10	7	9
Bicycle lighting	9	4	10	17	12	10
Miscellaneous	1	2	2	1	3	1
I do not know	4	2	2	4	1	3

RAC

- A glaring problem: RAC calls for action on headlight glare as eight-in-10 drivers affected say problem is getting worse | RAC Media Centre

PRESS RELEASE – 10 JANUARY 2024 00:01

A glaring problem: RAC calls for action on headlight glare as eight-in-10 drivers affected say problem is getting worse

The RAC is calling on the Government to commission an independent study into the issue of headlight glare after new research found 85% of those affected believe the problem is getting worse.*

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UN ECE Glare Task Force

Decision October 2024
1st meeting January 23rd

XII. Glare Issues (agenda item 11)

Documentation: Informal documents GRE-91-17, GRE-91-20

28. The expert of FIA proposed to establish a Task Force on Glare Prevention (TF GP) and introduced its first draft Terms of Reference (GRE-91-20). GRE experts made a number of comments on the draft. The experts from Canada, Germany and the Kingdom of the Netherlands (pending confirmation by the next session of GRE) stated that they would be interested in acting as Co-Chairs, while GTB offered secretariat support to TF GP. In reply to a question from the expert of EC, the secretariat clarified that contracting parties to the 1998 Agreement are full participants in WP.29 and its subsidiary working parties, including GRE, and can participate in all activities, including those under the 1958 Agreement and its UN Regulations, upon understanding that final legal decisions on UN Regulations are taken by the Administrative Committee (AC.1), composed of contracting parties to the 1958 Agreement only.

29. GRE launched the Task Force and requested it to review GRE-91-20 with the aim to submit updated Terms of Reference for adoption at the next session. GRE also agreed that glare prevention should be listed among the 2025 priorities.

30. The expert from Japan reported on the outcome of their research into standards for automotive lighting in an ageing society (GRE-91-17), which identified the decreased vision of elderly people at night, due to reduced eyesight and increased glare, compared to younger people. As solutions, the expert proposed that a light distribution design should address glare and visibility for elderly drivers and that an evaluation should be conducted on how new headlamp technologies (auto-levelling, adaptive driving beam, headlamp cleaners, etc.) improve visibility and anti-glare performance. The Chair invited TF GP to consider these suggestions.

Pages / ... / Task Force on Glare Prevention (TF GP)

TF GP - 1st session (kick-off)

Created by Davide Puglisi, last modified on 20 Dec, 2024

WebEx, 23 January 2025

Informal Documents

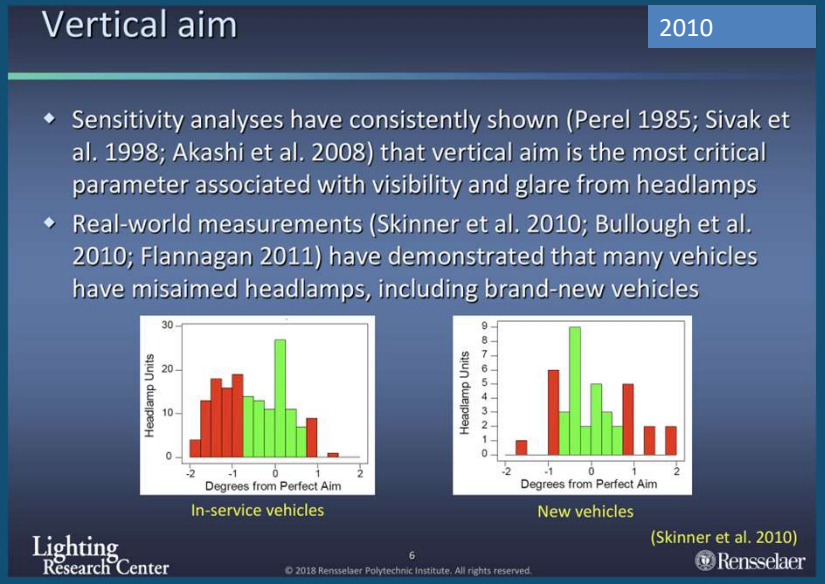
File	Modified
TFGP-00-01_Draft Agenda kick-off meeting_WebEx, 23 JAN 2025.docx	20 Dec, 2024 by Davide Puglisi

No labels

Vehicle Regulations Informal Working Groups
UNECE Transport Division

Not a new topic

- USA study – 2010 - aiming
- GTB – GRE study – 2012 - leveling



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Meeting - Expected outcome

- Explanation of the concern to understand and define the problems
- Discussion between expert from authorities, universities, light source maker, lamp maker and OEM

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Main causes of Glare

- Aiming failure
- High beam on while car is approaching (driver error)
- Car pitch variation
- Wet roads: Glare due to reflection of low beam foreground to oncoming driver
- Rear fog lamp misuse
- Lamp mounting height
- Brake and turn lamps too bright in nighttime traffic jams
- Lamp intensity
- Dirty headlight
- Elderly drivers

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