



Informal document GRE-70-41 (70th GRE, 21-23 October 2013, agenda item 4(b))

ECE/TRANS/WP.29/GRE/2013/57

Alternative aiming/leveling

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Informal document No. GRE-67-33 (65th GRE, 28-31 March 2011, agenda item 5(d))





AUTOMATIC LEVELLING

AT PRESENT - DESIGN ORIENTED REQUIREMENT

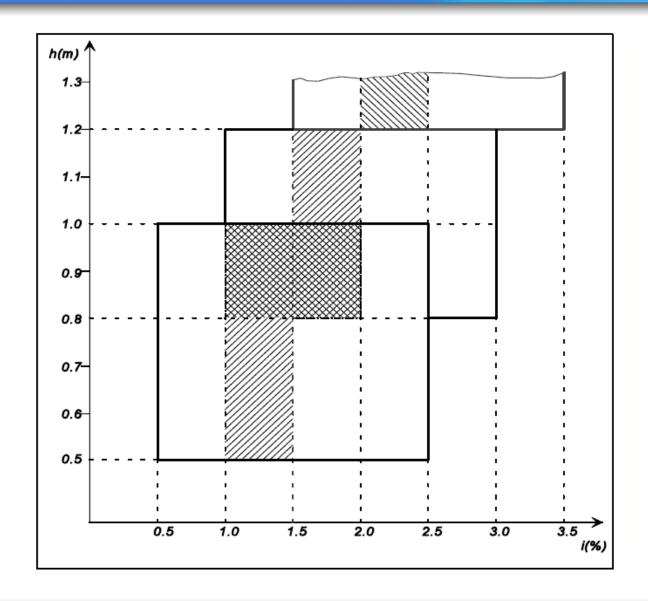
- 2000 lm (artificial arbitrary criterion)
- Gas discharge (35W, 25W?)
- LED

No relation to performance



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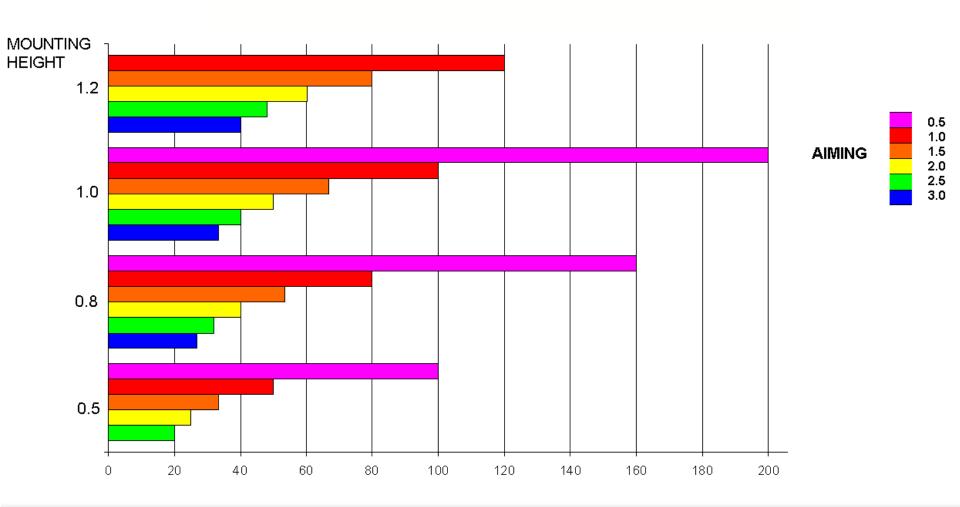




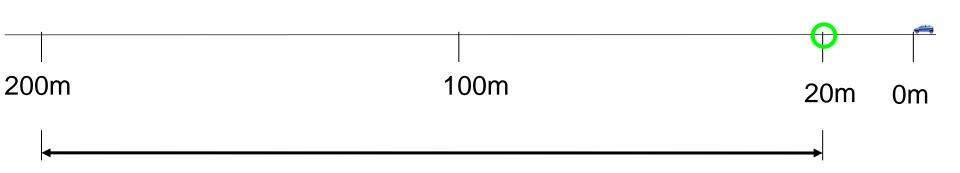




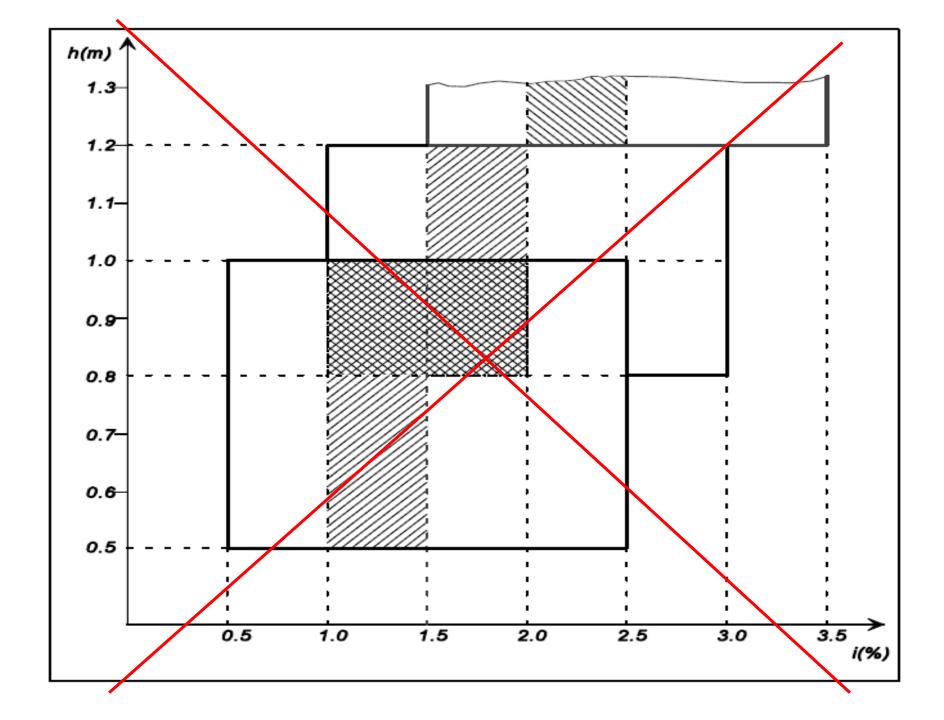
REGULATORY (Reg.48) VISIBILITY DISTANCE [m]

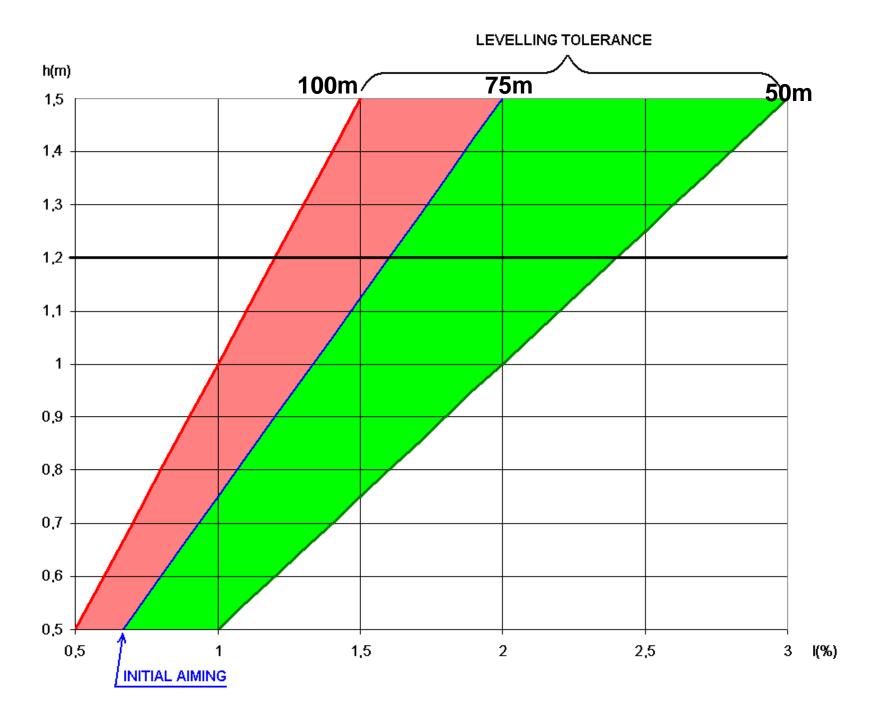


Real sizes and distances



Possible road illumination distance in Reg 48.







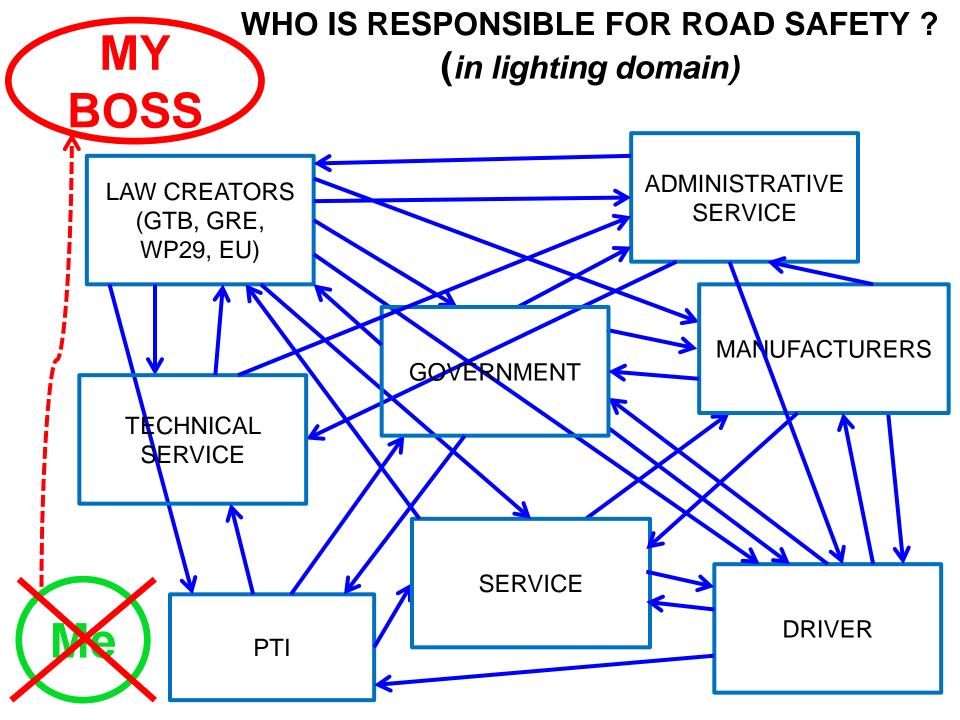


Informal document No. GRE-65-30 (65th GRE, 28-31 March 2011, agenda item 5(d))

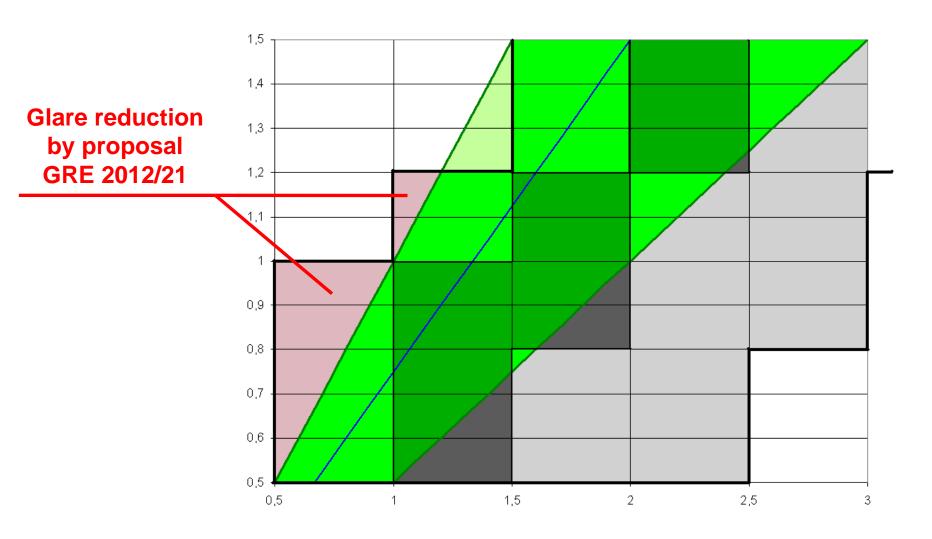
BASE FOR REAL HUMAN DECISIONS IN MOST SITUATIONS





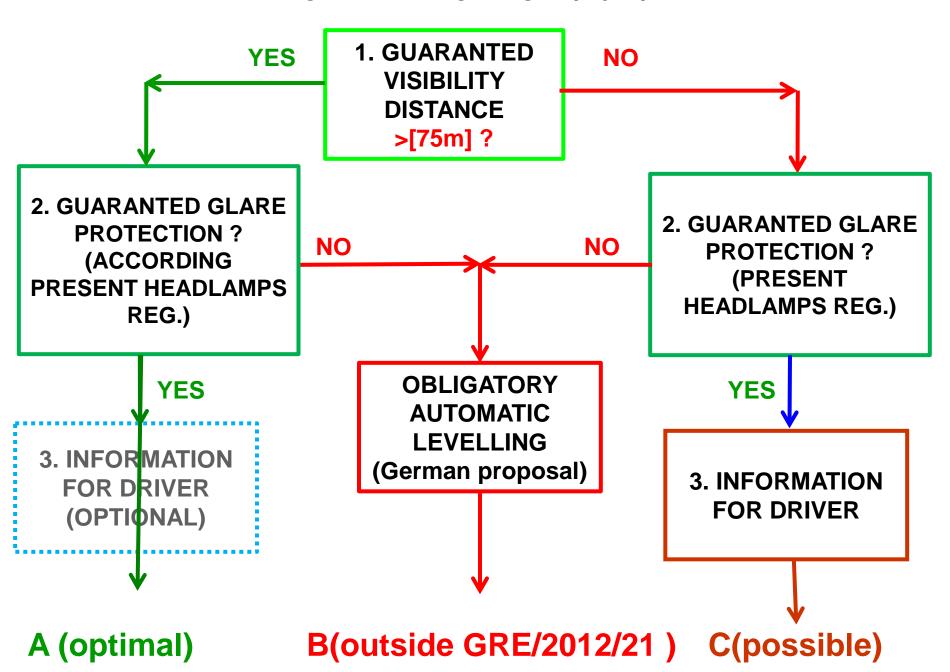


GLARE PROTECTION



Proposal reduce glare comparing present situation for most vehicles, especially cars

HOW WILL WORK GRE/2012/21





(67th GRE, 26-29 March 2012, agenda item 4(c)(i))

Comments on GRE/2012/21 (Lighting & Signalling WG)

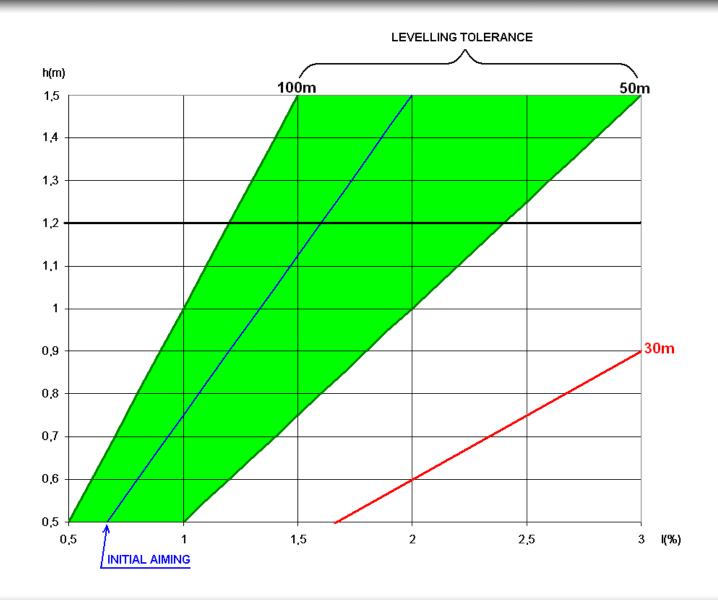
Headlamp Initial Aiming

March 2012



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Informal document No. GRE-68-20 (68th GRE, 15-18 October 2012, agenda item 4(c)(i))

Comments on GRE/2012/27(Lighting & Signalling WG)

Headlamp Initial Aiming

October 2012

Proposed Initial nominal aim to correspond to 75m theoretical range

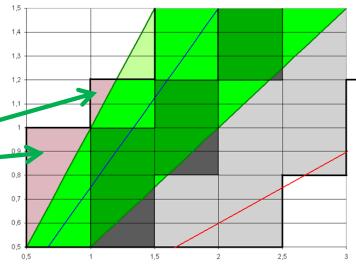
- Under proposal,
 - No <u>overlap between height bands</u>
 - Most headlamps would be aimed <u>higher than at present</u>

It will depend on manufacturers decision and choice of range of amended Reg.48 (30 to100m or 50 to 100m)

It will be safety oriented advantage and goal of amendment because of longer average road illumination distance.

• Risks increased glare.

Not true. Decreased glare comparing present state.

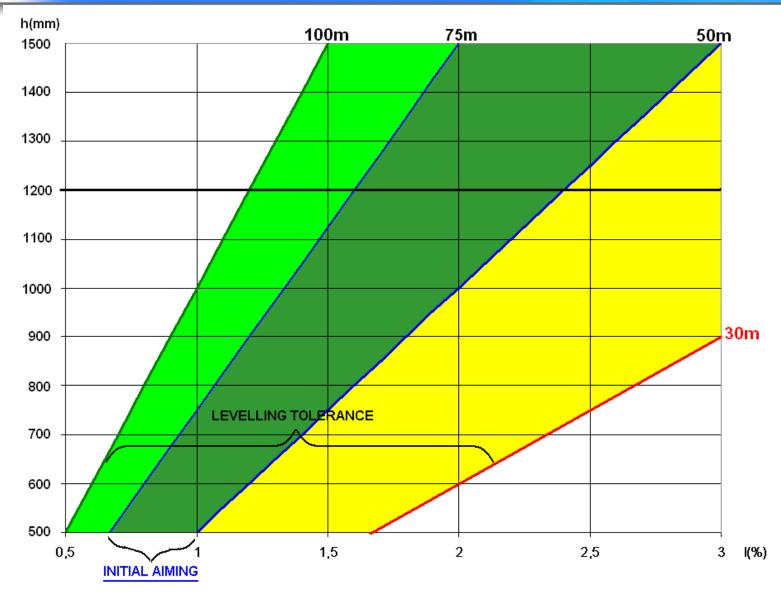


What for are needed overlaps?



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GOOD, COMBINED PROPOSAL

true
"PERFORMANCE ORIENTED"

AS TODAY:
ARTIFICIAL 2000lm
"DESIGN ORIENTED"

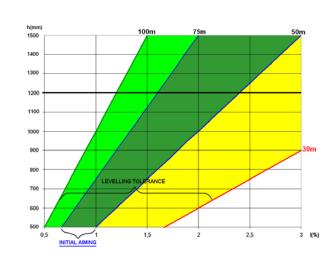
OICA

OR

NEARLY AS TODAY BUT
"PERFORMANCE ORIENTED"
ROAD ILLUMINATION DISTANCE AS
CRITERION, NO RESTRICTIONS
MANUFACTURER CHOICE
NO 2000 Im NO LIGHT SOURCE CRITERION

h(m)
1.3
1.2
1.1
1.0
0.8
0.7
0.8
0.7
0.8
0.5
1.0
1.5
2.0
2.5
3.0
3.5
(%)

MANUFACTURER CHOICE









THANK YOU FOR YOUR ATTENTION