Informal Document No. GRE-63-01 (63rd GRE, 29 - 31 March 2010, agenda item 4(b))

Justification to ECE/TRANS/WP.29/GRE/2010/16:

Exterior courtesy lamps of the vehicle illuminate the surrounding field of the vehicle. This can assist the driver during slow manoeuvres e.g., in parking garages, by illuminating obstacles and pedestrians. It will improve pedestrian safety and minimize vehicle damage risk.

Actual situation:

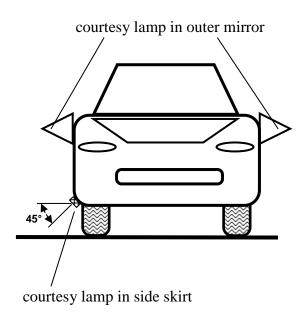
- Dipped-beam headlamps illuminate the road surface 2.50 m ahead of the vehicle.
- No illumination at the side of the vehicle is allowed during driving.
- Courtesy lamps are not allowed to be switched on when the engine is running.
- Side marker lamps are not appropriate to illuminate the side of the vehicle or the road surface.
- → During slow maneuvres, the surrounding of the vehicle is not properly illuminated to recognize objects such as pedestrians, ramps, road curbs, etc. during darkness.
- → Many accidents happen in these low speed and reverse situations some with dangerous injuries of humans.

Aims of the proposal for activation of coutesy lamps are to

- > protect pedestrians walking by or standing
- > avoid damages of the own vehicle
- > avoid damages of the property of other road users
- ➤ illuminate dangerous objects
- > give the driver a chance to recognize objects in the near surrounding of the vehicle e.g. in a parking garage
- ➤ assist parking maneuvers.

Locations of Courtesy Lamps

The pictures show typical places for mounting. Further locations are not excluded.



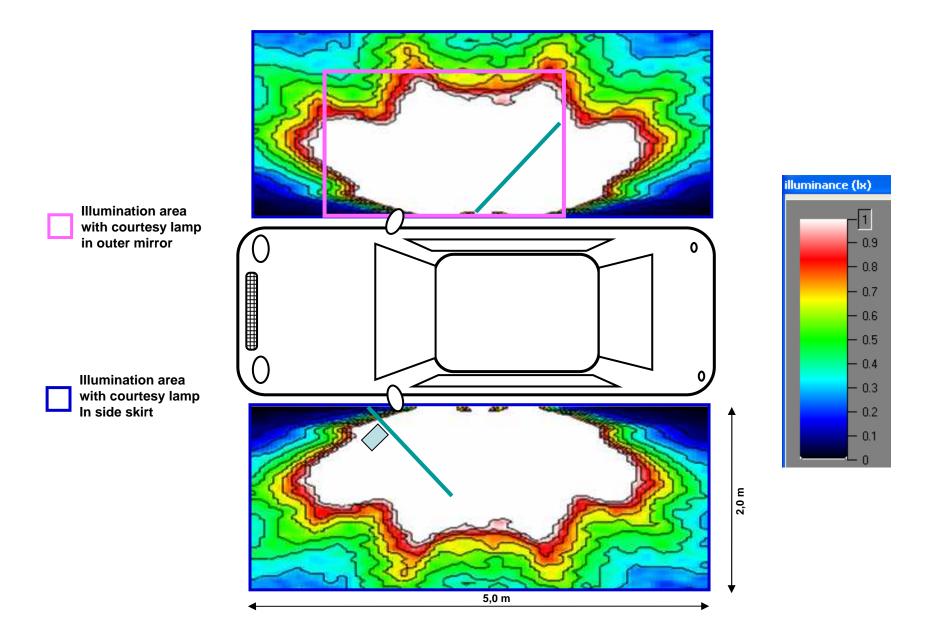
courtesy lamp in outer mirror

courtesy lamp integrated in side skirt with leds



courtesy lamp integrated in outer mirror

Typical Field of Illumination of Courtesy Lamps



Backing Up Aid and Maneuvering Driver Assistance System

Functionality:

- a camera system consisting of 4 or more cameras assists the driver at parking and maneuvering:
 - 2 cameras in the outer mirrors
 - 1 camera at the tail (rear-view camera)
 - 1 camera at the front module
- In adition to the normal camera image, a virtual viewpoint (the "Top View") is generated showing the near surroundings of the vehicle from a bird's-view perspective.
- The virtual picture will be displayed on a screen within the driver's field of view.

