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Item 0.4

#### GTB Working Group Signal Lighting

Roadmap

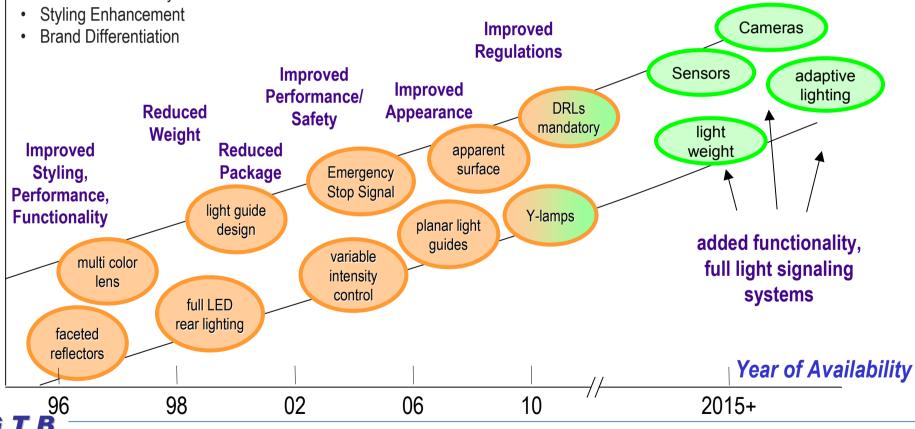
(February 2011)



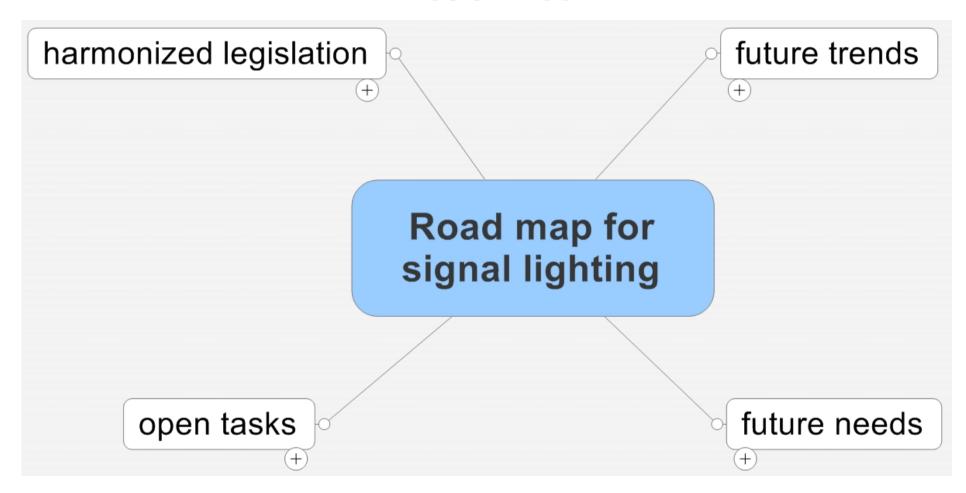
## Market demands and trends for signal lighting

#### **Value**

- Increased Safety and Convenience
- · Improved Lighting Performance
- Added Functionality



#### Road map for signal lighting headlines



#### Road map for signal lighting harmonized legislation (1)

#### harmonized legislation

geometric visibility

uniform provisions for all signalling functions

reduced inboard visibility

Horizontal Reference Document \_ contribution of WG SL

retro reflective material

alignment of photometric values R70 and R104



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#### Road map for signal lighting harmonized legislation (2)

- Throughout the years all regulations have been subject to amendments due to various proposals
- At one hand not all regulations have been updated simultaneously / in the same manner
- On the other hand a lot of the text inside the different regulations is manifold existent
- > The goal is to harmonize these discrepancies either in each regulation or as a new approach in a "horizontal reference document"



# Road map for signal lighting open tasks (1)





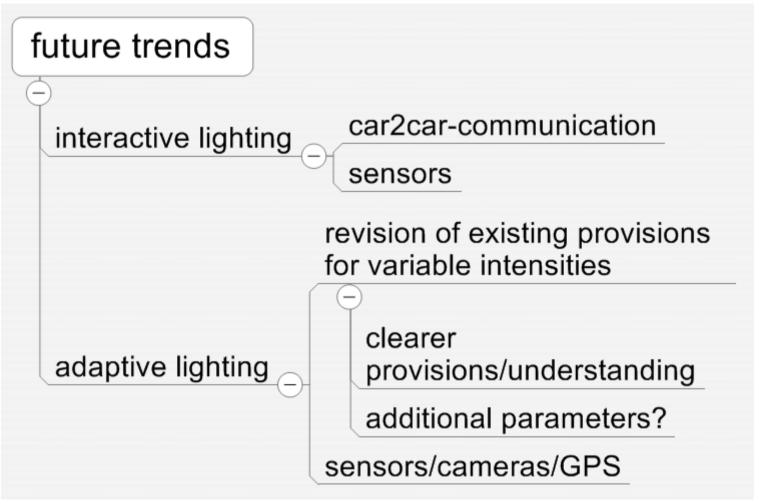
The International Automotive Lighting

## Road map for signal lighting open tasks (2)

- In the recent past, different proposals have been submitted by WG SL on specific issues (e.g. Y-lamps)
- Some of these proposals need to be transferred to other regulations dealing with the same topic
- Accomplish the started tasks



# Road map for signal lighting future trends (1)





The International Automotive Lighting

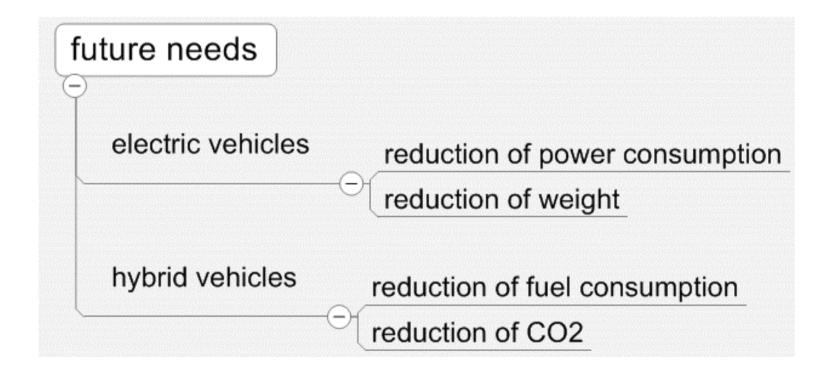
#### Road map for signal lighting future trends (2)

- Today's car-architecture enables the networking of the various systems inside a car (already common practice in some applications of front lighting)
- Existing Regulation might be used in broader context for the sake of further benefit
- Explore new possible technology trends and their impact on automotive lighting and refine existing regulations to keep pace with technology progress



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#### Road map for signal lighting future needs (1)



#### Road map for signal lighting future needs (2)

- The global automotive world faces innovative and economic propulsion systems
- With the new generation of electric and hybrid vehicles also new challenges arise for automotive lighting
- > This leads to the need of appropriate legal requirements for new concepts of light-weight and low-consuming lighting and light-signalling devices



#### Thank you for your attention!

