

# GTB Strategy for RID Simplification

# INTRODUCTION

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- ▶ **Definition of requirements for basic passing beam which is technologically neutral and performance oriented. And then?**
- ▶ **How to manage AFS?**
- ▶ **How to manage beam of categories AS, BS, CS, DS & ES (from R113).**

# STRATEGY

## Currently



6 regulations  
24 Beam patterns

- R112 Class A
- Class B
- Class AR
- Class BR
- R98 Class DC
- Class DR
- R123 Class C
- Class E
- Class V
- Class W
- Class XR
- ADB
- R113 Class A
- Class B
- Class C
- Class D
- Class E
- Class R-B
- Class R-C
- Class R- D
- Class R- E
- R19 Class B F3
- R119 Class K

## RID

- Class A
- Class B
- Class AR
- Class BR
- Class DC
- Class DR
- Class C
- Class E
- Class V
- Class W
- Class XR
- ADB
- Class AS
- Class BS
- Class CS
- Class DS
- Class ES
- Class R-BS
- Class R-CS
- Class R- DS
- Class R- ES
- Class F3
- Class K

1 regulation  
23 Beam patterns

## In the future: RID stage 2

- Basic Passing beam
- Low speed Passing beam
- Motorway Passing beam
- Basic Driving beam
- Low speed Driving beam
- ADB
- Fog Lamp
- Cornering Lamp

1 regulation  
8 ? Beam patterns

TC4-45 SAE J2829  
Expertise of Optical engineers

# NEXT STEPS?

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## Polishing the strategy:

- ▶ How to manage the different technical requirements → July 18.
  - ▶ Basic beam, low speed passing beam, AFS, which light distribution for which vehicles?

## Technical requirements:

- ▶ Validation of basic requirement for passing beam. → July 18
- ▶ Management of AFS/ ADB. → Nov 18
  - ▶ Definition of basic requirement for low speed passing beam/ Motorway passing beam.
  - ▶ ADB
- ▶ Definition of basic requirement for driving beam.
- ▶ Front fog lamps.
- ▶ Cornering .

## Redaction:

- ▶ Rewrite / optimization of RID text to be done in parallel with the technical analysis. As soon as technical requirements for the different beam patterns are frozen .

## IDEA FOR AFS

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**Based upon the basic requirements for the passing beam, the beam pattern may change automatically according to the driving conditions, provided that the requirements are achieved at every time.**

**If the speed of the vehicle is less than 50 (?) km/h, the beam pattern(s) may achieve the low-speed requirements.**

- ▶ If the maximum speed of the vehicle is less than 50km/h by design, only low speed passing beam is required on the vehicle.

**If the speed of the vehicle is greater than X km/h, the beam pattern(s) may achieve the motorway passing beam requirements.**

**ADB: to combine the requirement of basic/motorway passing beam below HH line + current requirement of R123 table 7 A & B (with adaptation).**

### **Questions:**

- ▶ same requirements for all kind of vehicles (car, agricultural vehicles, motorbikes)?
- ▶ How to manage adverse weather?

## IDEA FOR AFS

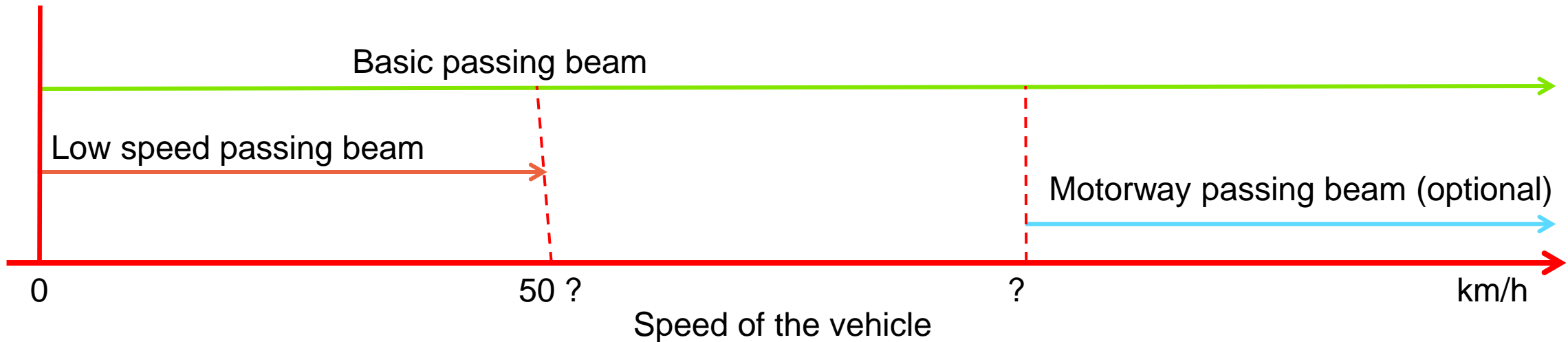
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Consider the directions defined for the new basic passing beam ,

Consider the requirement of R123 Class V requirements,

Propose requirements for passing beam for motorways based upon R123 E requirements.

Which passing beam/speed?



# WHICH BEAM(S) FOR WHICH VEHICLE?



**To be addressed with GTB/WG-I**

# CURRENTLY



B  
D  
AFS  
FFL  
CL

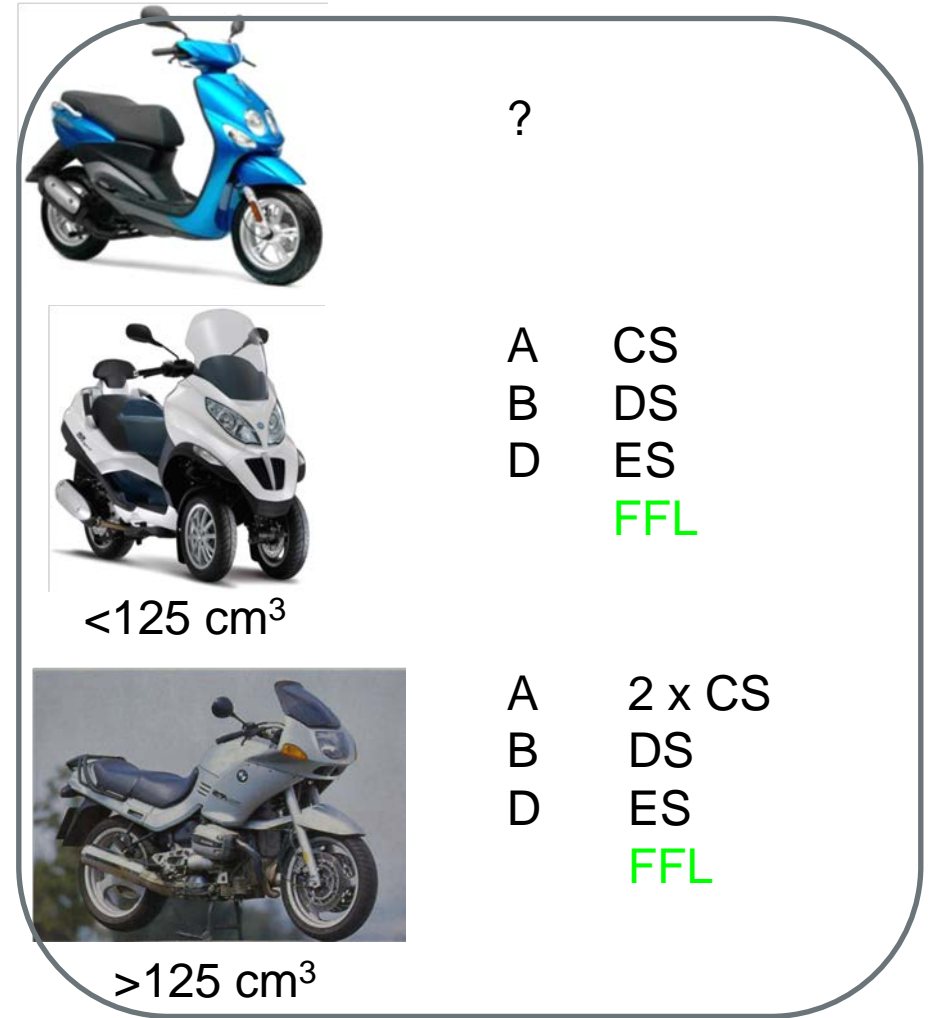
R48

Mandatory  
Optional



A  
B  
D  
AS  
BS  
CS  
DS  
ES  
FFL  
CL

R86



?

A CS  
B DS  
D ES  
FFL

<125 cm<sup>3</sup>

A 2 x CS  
B DS  
D ES  
FFL

>125 cm<sup>3</sup>

R53



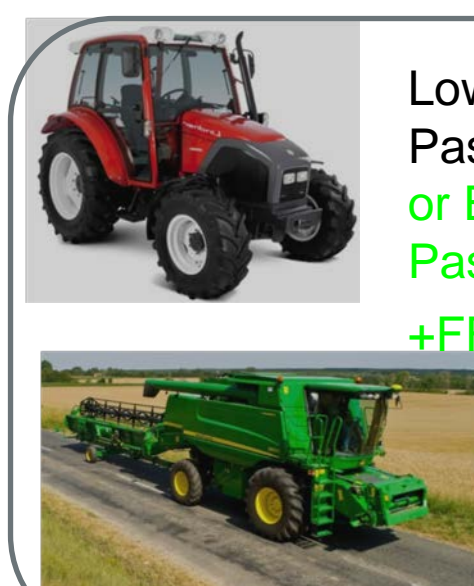
# IN THE FUTURE (PROPOSAL)




Basic Passing beam  
 + LS+Motorway  
 +ADB  
 +FFL +CL

R48


Mandatory  
 Optional




Low speed  
 Passing beam  
 or Basic  
 Passing beam  
 +FFL +CL (\*)




R86



Specific passing beam or Low speed Passing beam?  
 or Basic  
 Passing beam  
 +FFL +CL (\*)



~~<125 cm<sup>3</sup>~~



Specific passing beam or Basic  
 Passing beam  
 + LS + Motor way  
 +ADB+  
 FFL +CL (\*)

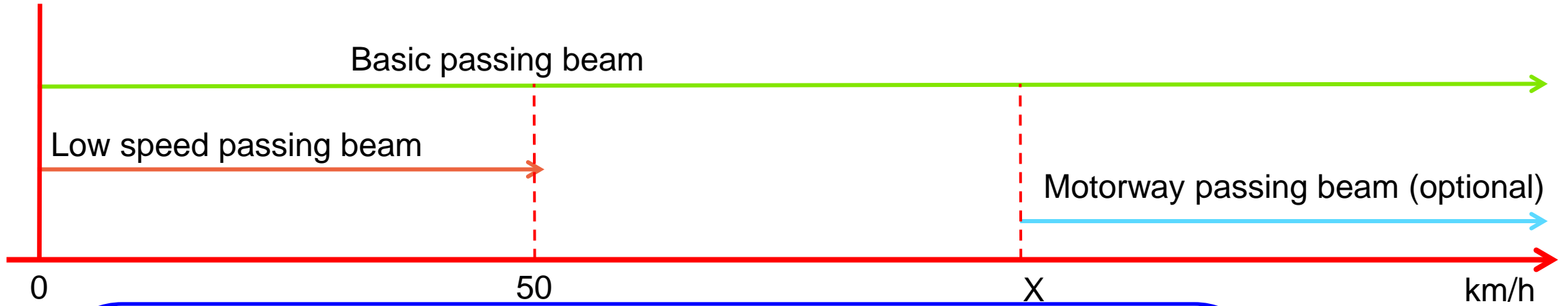
~~≥125 cm<sup>3</sup>~~

R53

The beam category should depend on the speed of the vehicle and not on the vehicle category, anymore.

**(\*) Common strategy to be shared with agricultural machines manufacturers and IMMA**

# PROPOSAL: COMMON STRATEGY TO BE SHARED WITH AGRICULTURAL MACHINES MANUFACTURERS AND IMMA



**One simple rule for all vehicles?**