

# Connectivity Will Make Motorcycling Safer

**FIM EUROPE CONGRESS**  
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- CMC Steering Committee Member
- ACEM ITS WG Chairman
- Car2Car Communication Consortium PTW Sub-WG Chairman
- EU C-ITS platform Expert

# Benefit: Valuable Contribution to Future Mobility

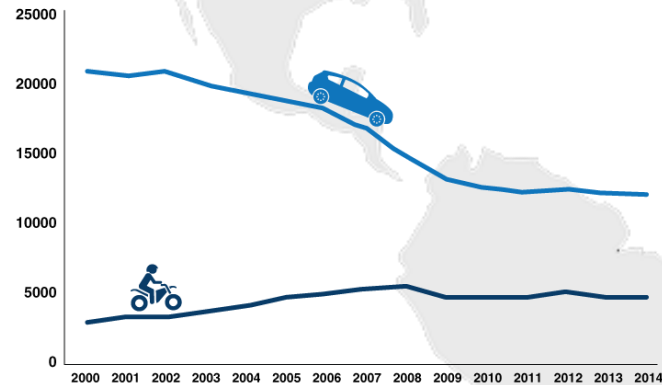
- Motorcycles have great potential -
  - Ideal urban mobility
  - Minimal space requirements
  - Smart combination of leisure and commuting
  - Favourable ecological footprint



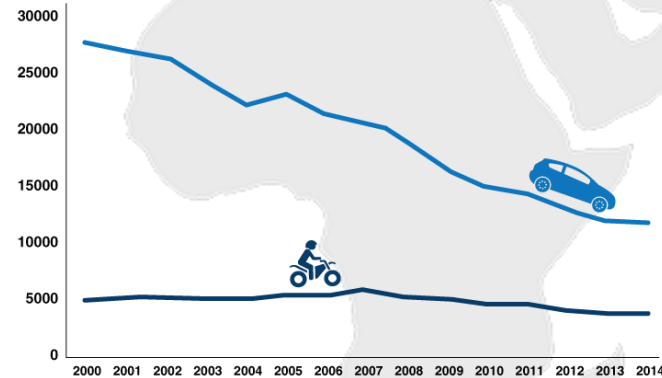
# Challenge: Motorcycle Safety

## Development of car and motorcycle fatalities

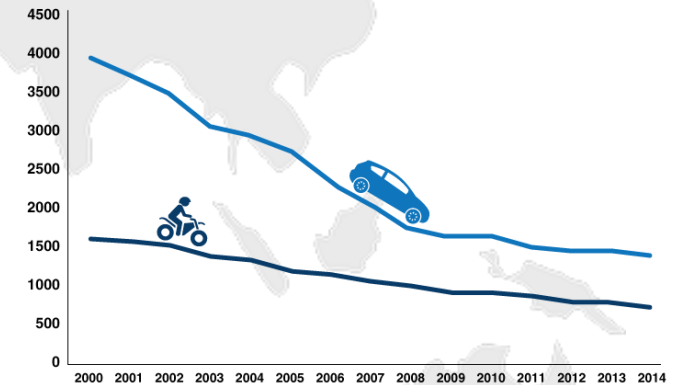
 **USA**



 **Europe**



 **Japan**



Source: IfZ

# Reasons: Perception Failures

Majority of accidents:  
Caused by other vehicle  
driver



**50 - 70 %**

OV driver causes accident

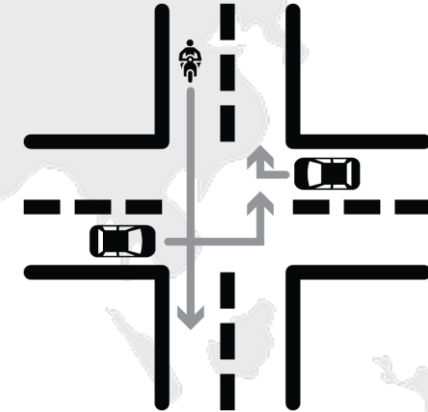
Majority of collision partner:  
Car



**60 - 90 %**

Collision partner is a car

Majority of collision type:  
Crossing and turning



**15 - 30 %**

Collisions at intersections

Source Data based on country specific studies (USA, Europe, Japan)



# Causation and Solution

## Human Error



**70 - 90%**  
perception failure by car driver

## Digital conspicuity



MAI (Motorcycle Approach Indicator)  
MAW (Motorcycle Approach Warning)

# Mission: Motorcycle's Integration in Connected Environment



# Milestone: ACEM Memorandum of Understanding

Connectivity technology like C-ITS will become a major part of future mobility

## MoU Statement:

*“...The ACEM manufacturing members agree to initiate deployment of safety-relevant cooperative ITS on PTWs\* in Europe and agree to have **at least one of their models available for sale with a cooperative ITS, either as standard equipment or as optional equipment, by 2020.**”*

Signed by all ACEM manufacturing members:



\*Powered Two Wheeler

Published on 29 September 2014

# Milestone: CMC MoU

## MoU Statement

*"...A cooperative approach to enhance motorcycle safety possibly by joint promotion, research and development of C-ITS on Powered Two Wheelers ("PTW") in Japan, USA and Europe...."*



Signed by BMW Motorrad, Honda and Yamaha



BMW Motorrad



\*Powered Two Wheeler

Signed June 2015



# General orientation of CMC

## Creating a common base for Motorcycle ITS

- CMC is a **non-profit**-organisation (and no funding project)
- CMC has a **global focus** → international representations, meetings, activities
- **Technical expertise** is required
- **No** development of **series components/no common development** or bundled **purchasing**
- **Final results** of the project will be **published**.

# CMC Vision & Objectives

## VISION

Enhance Riding safety by jointly promoting, researching and developing C-ITS for motorcycles

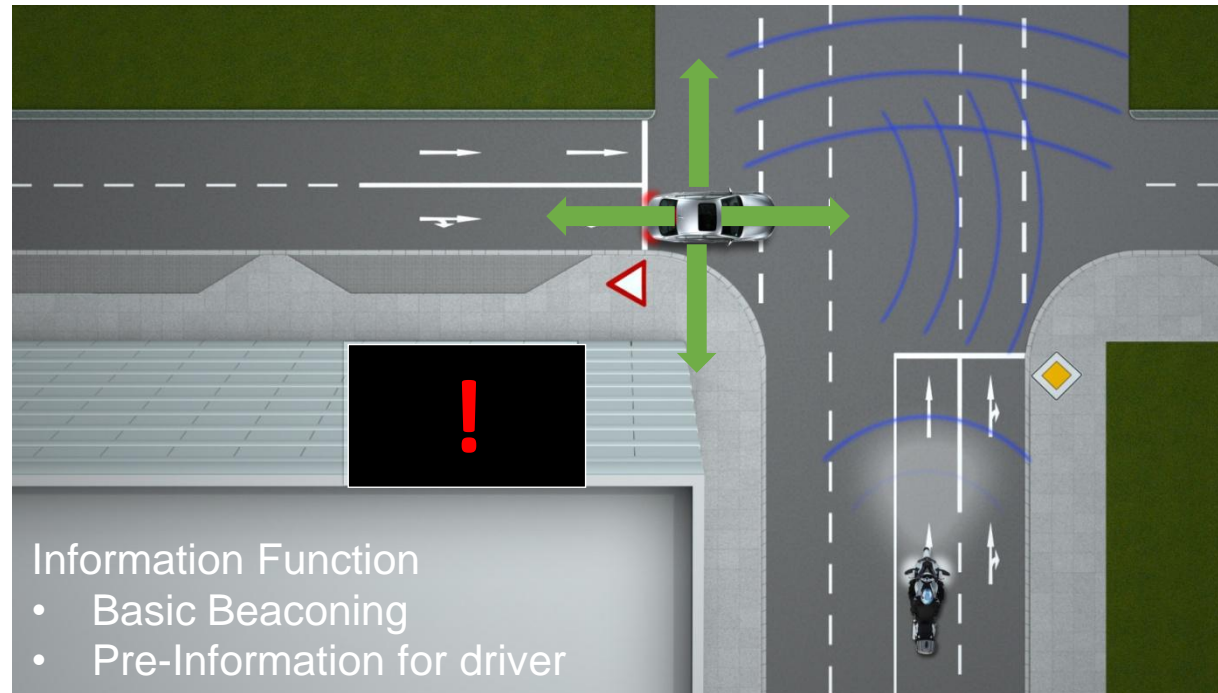
## OBJECTIVES

- **Integrating** Motorcycles as an accepted and recognized partner into global future ITS strategies
- **Joining** our forces to create a common approach on ITS for motorcycles
- **Achieving** a successful implementation and deployment of motorcycle ITS functions



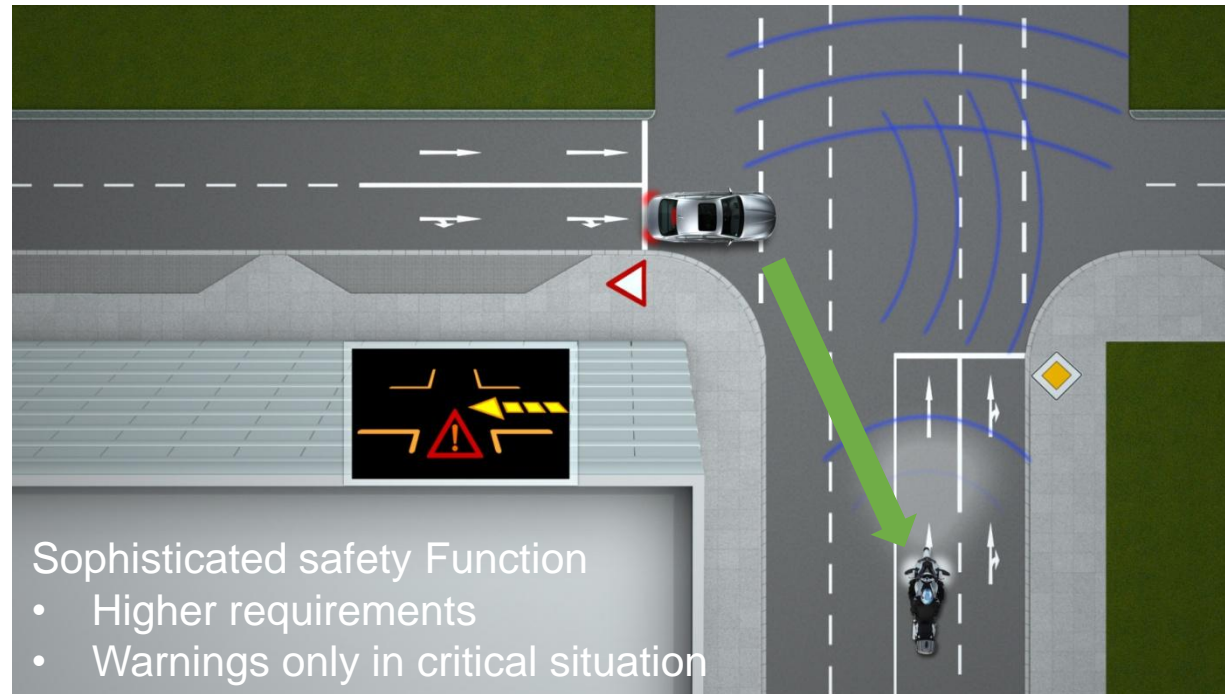
# Motorcycle Approach Indication (MAI)

## Day 1.5 – Information with Basic Function & Simple requirements



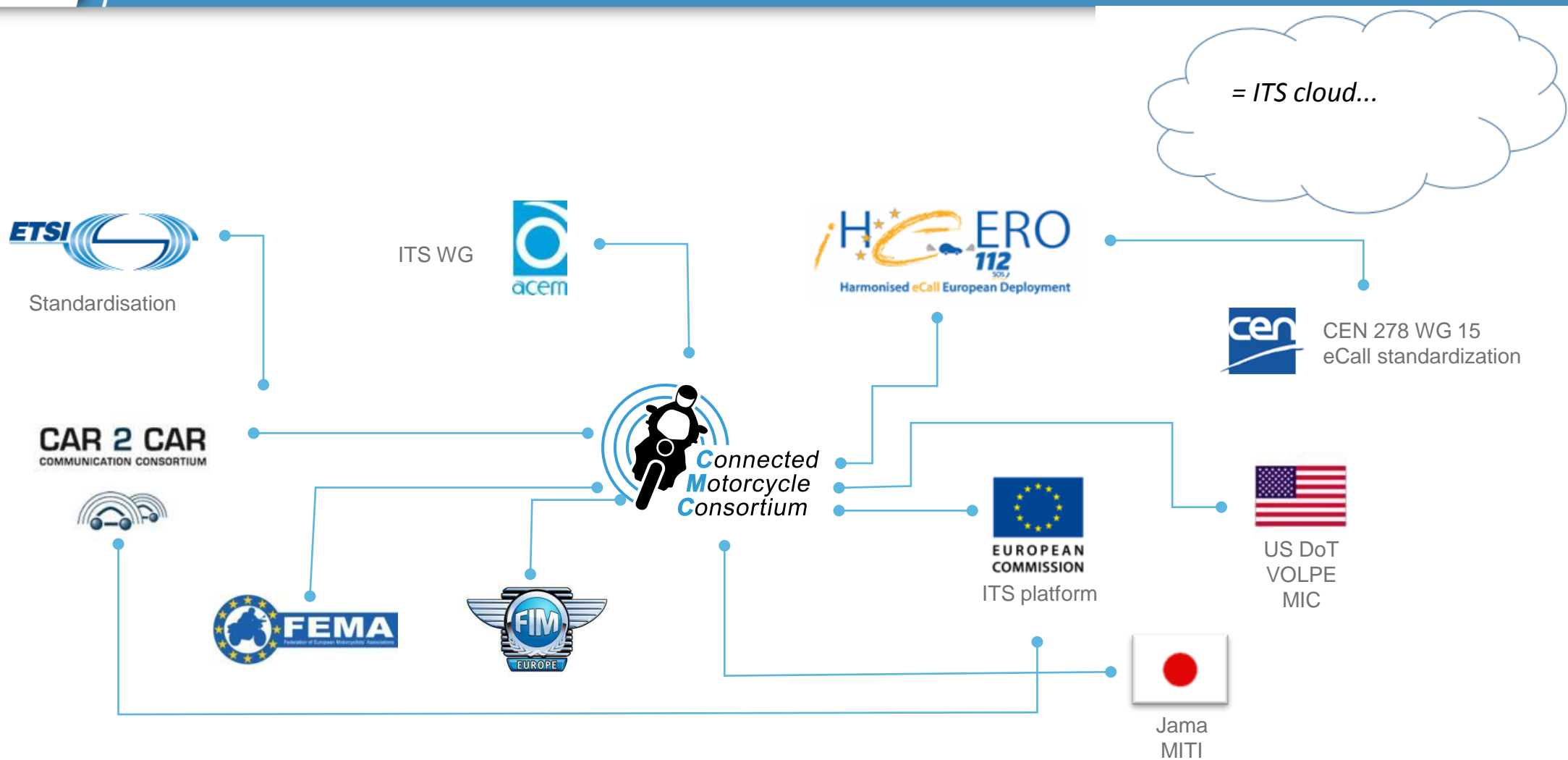
# Motorcycle Approach Warning (MAW)

## Day 2 – Warning in critical situations & Higher requirements





# ITS – many stakeholders need to act together



## Thank you for your attention

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BMW Motorrad



Kawasaki



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