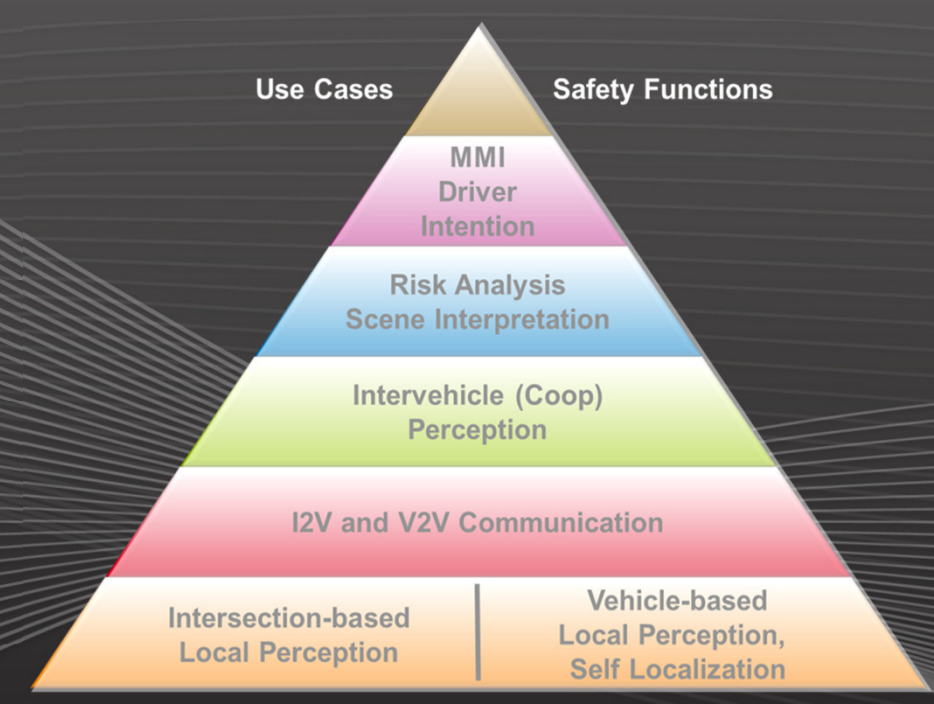
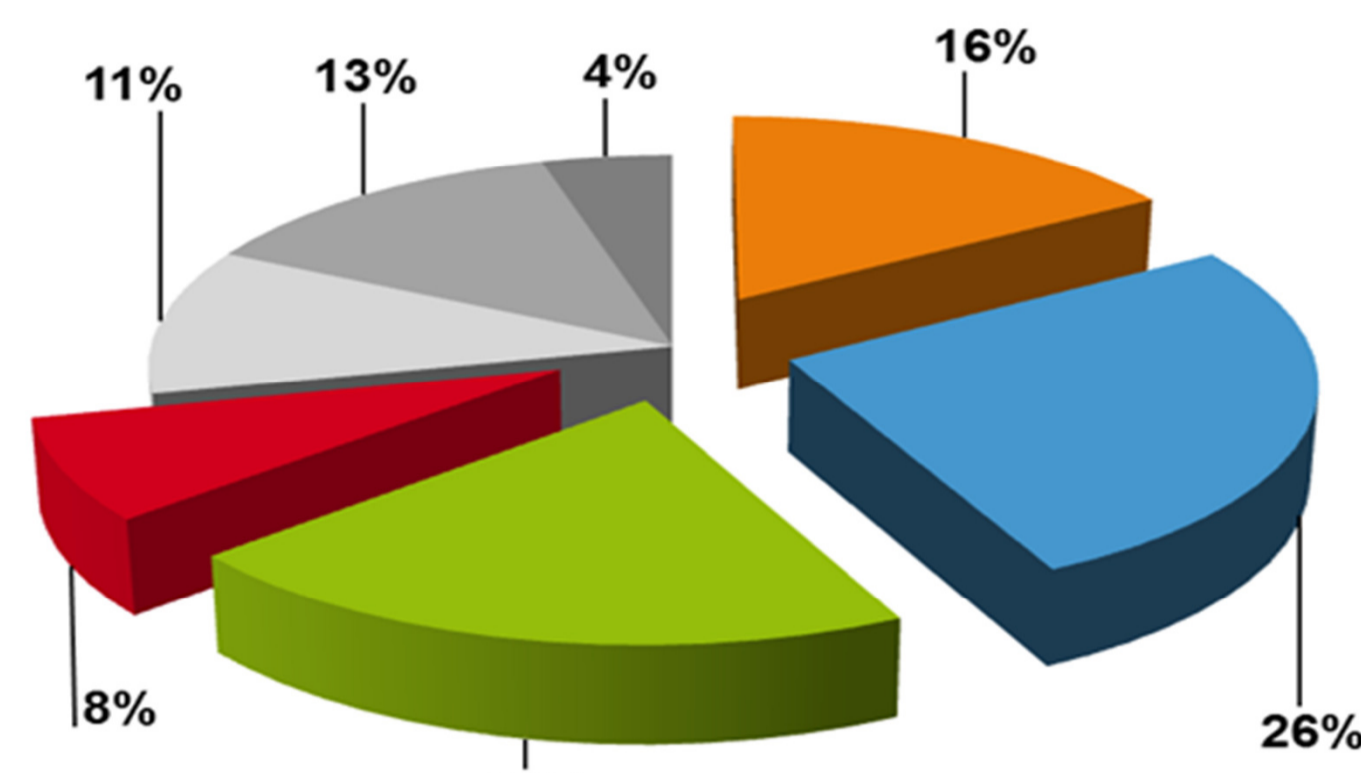


# Cooperative Perception Project Context and Objectives



## Accidents with personal injuries in 2012 in town/village

Source: German Federal Statistical Office (Destatis)

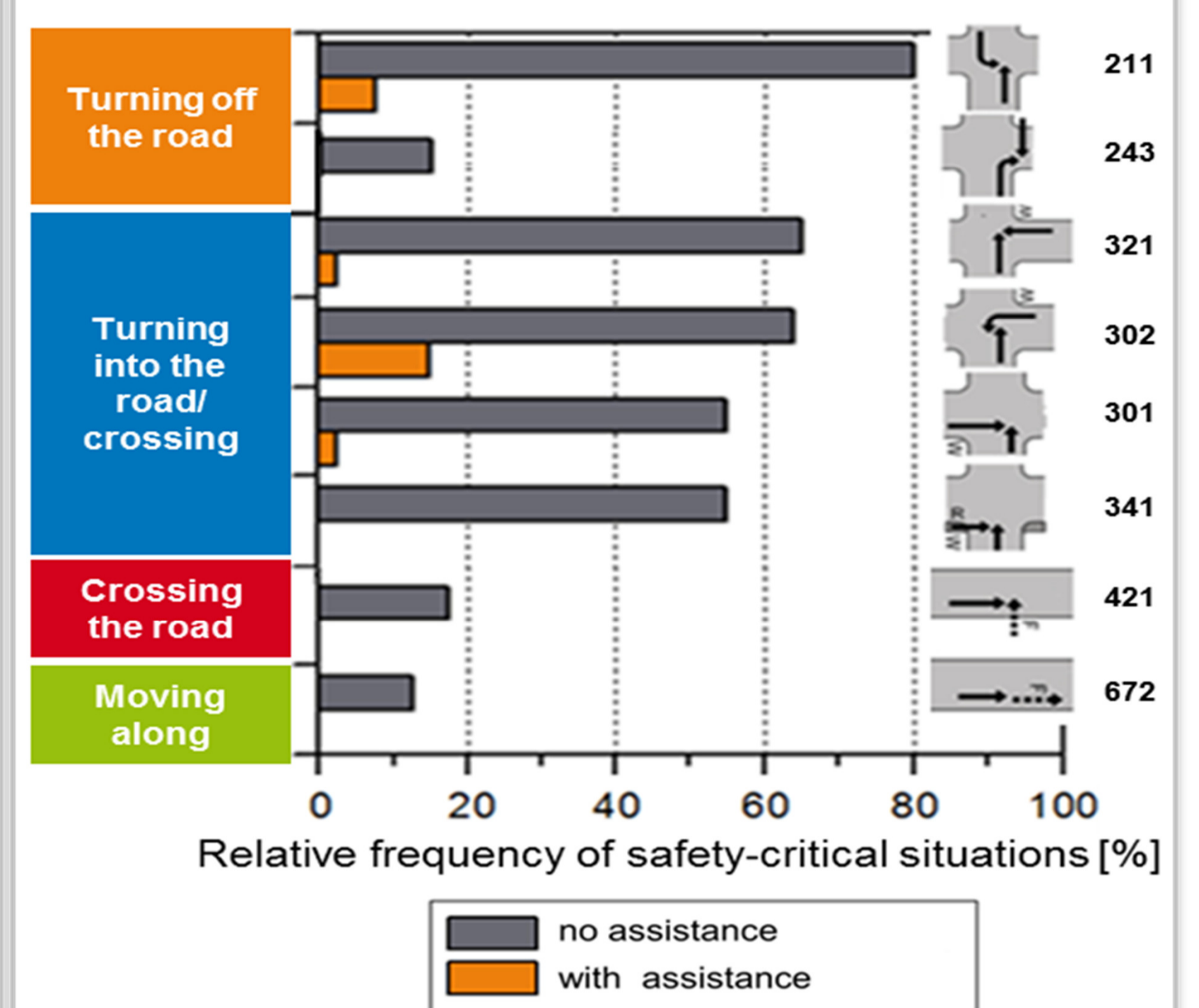


### Type of accident

- Turning off the road (Abbiegeunfall)
- Turning into the road/crossing (Einbiegen/Kreuzen)
- Vehicles moving along in carriageway (Längsverkehr)
- Crossing the road (Überschreitenunfall)
- Driving accident (Fahrerunfall)
- Other accident (Sonstiger)
- Stationary vehicles (Ruhender Verkehr)

## Assessment of potential benefit

Driving simulator studies featuring advisory warnings



## Project Goals

- Establish / improve preventive safety in longitudinal and intersection traffic
- Work towards virtually complete dynamic representation of traffic environment; integrate perception of adjacent vehicles and intersection
- Thus overcome blocked views, compensate for driver's inattentiveness
- Early inspire driver's mindfulness in case of emerging hazards
- Use novel HMI approaches based on driver information and last resort warnings
- Employ concurrence of diversely equipped test vehicles and intersection(s)

## Vehicle Type A

- Self-Localization Unit
- Communication Unit
- Perception System
- Assistance Function(s)

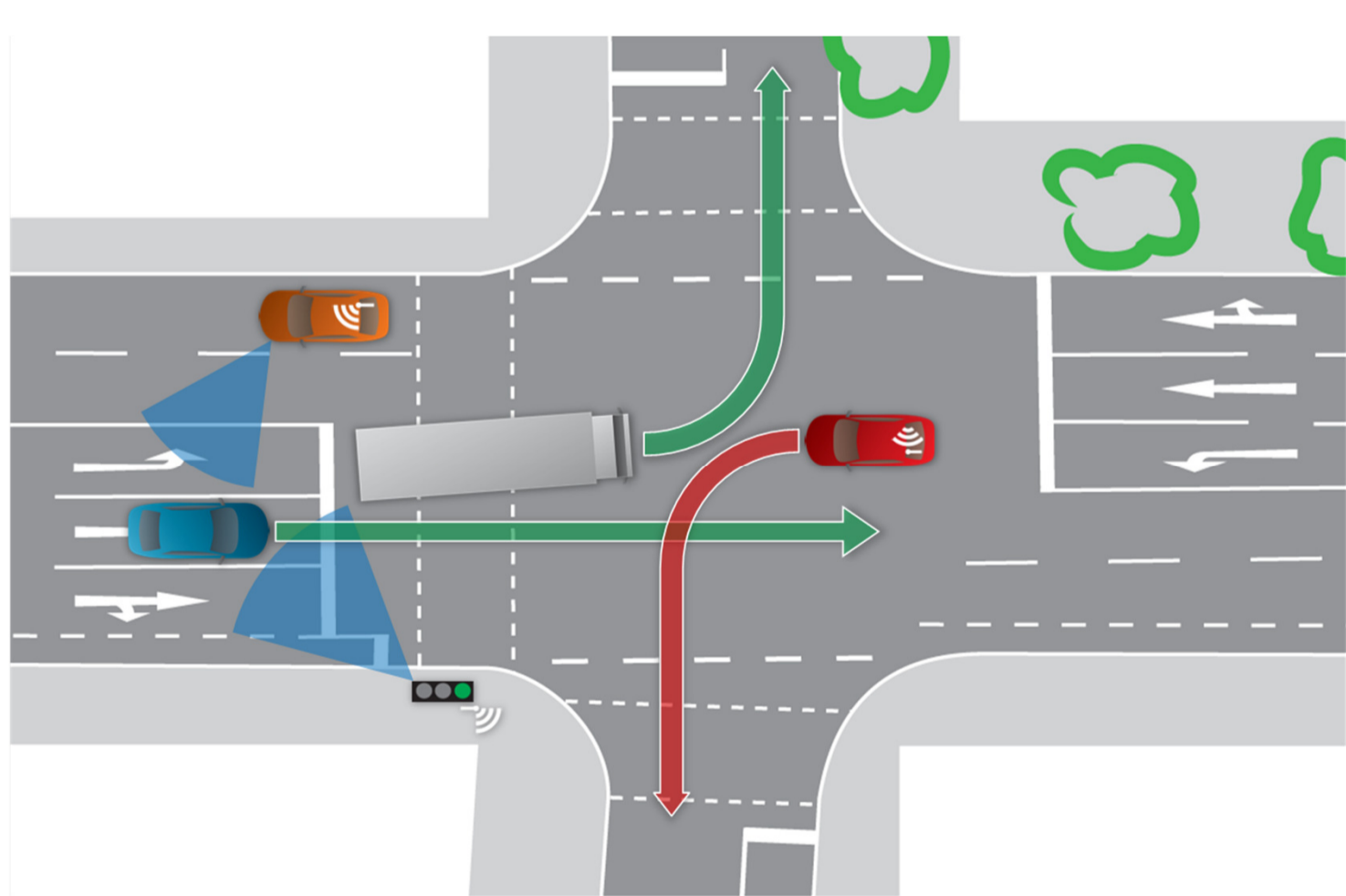
## Vehicle Type B

- Self-Localization Unit
- Communication Unit
- Assistance Function(s)

## Vehicle Type C

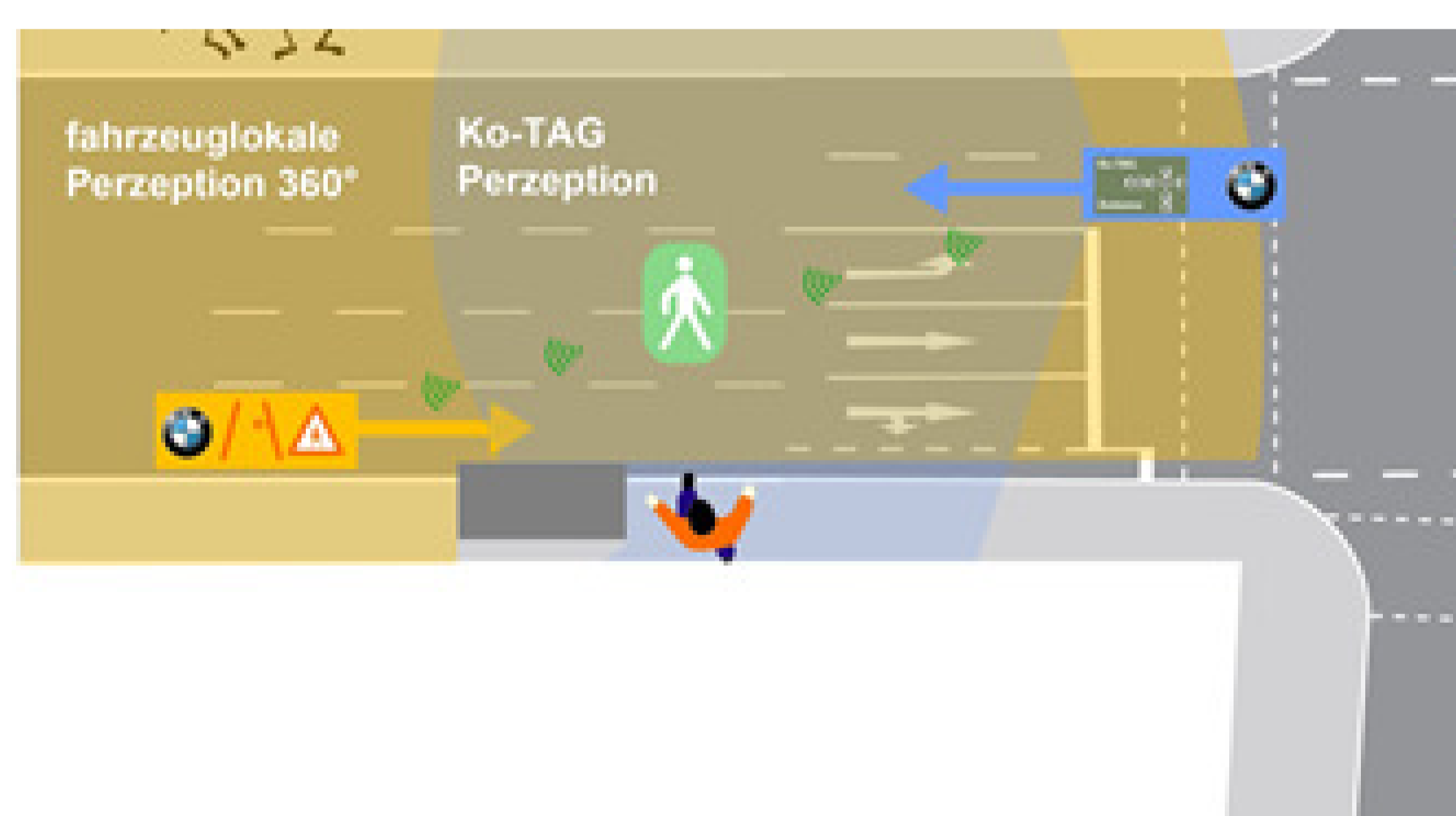
- Self-Localization Unit
- Communication Unit
- Perception System

## Example scenarios selected for today's live demonstrations



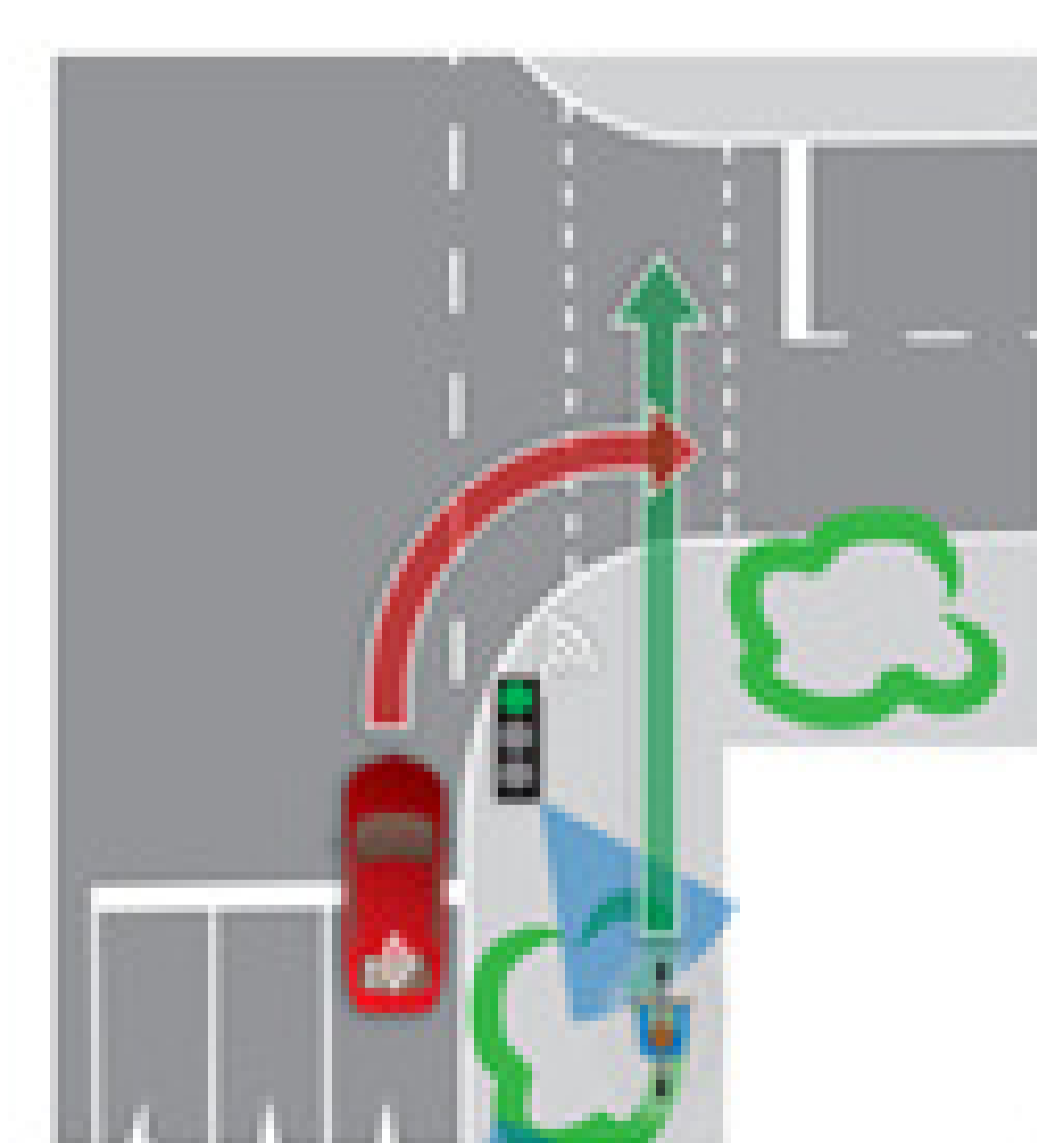
### Team 1

- Crossing with obscured view
- American style left turn with hidden contraflow



### Team 2

- Cooperative pedestrian protection (with Ko-TAG)
- Cooperative bicyclist protection (with Ko-TAG)
- Left turn assistance to protect VRUs



### Team 3

- Turning with circumspection