



Automated Driving Technologies & Partnerships Made by Germany for the World

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Daimler Greater China Ltd.
Highly Automated Driving
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Mercedes-Benz
The best or nothing.

Agenda

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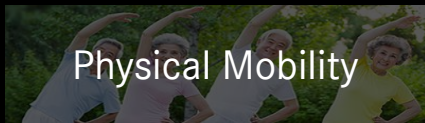
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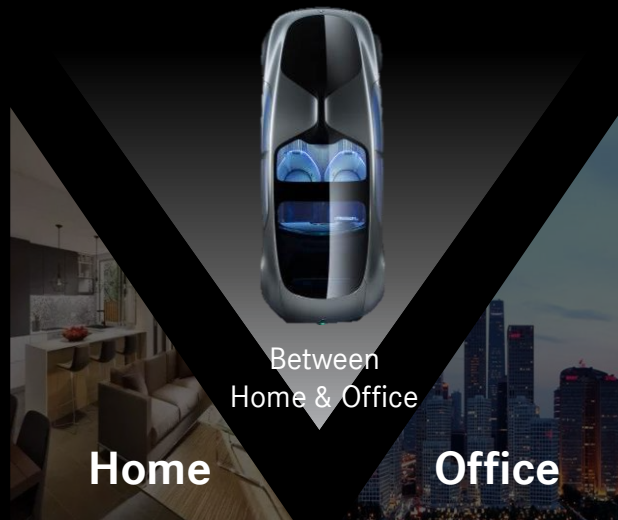
New Digital Ecosystem for Autonomous Driving

Motivations for Autonomous Driving

MOTIVATION



THE THIRD PLACE

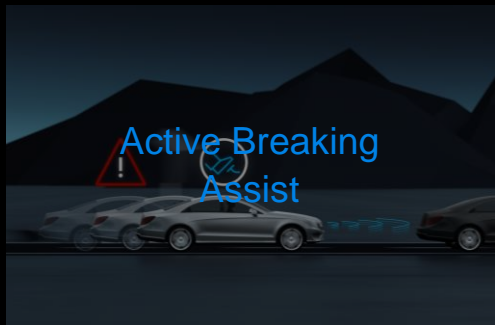
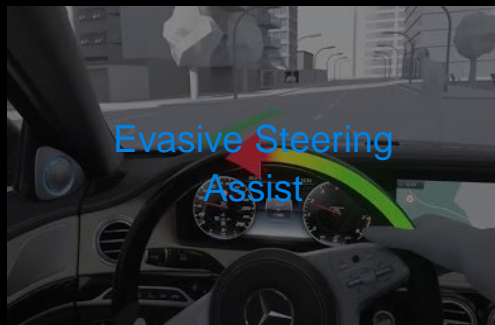


LUXURY IN MOTION

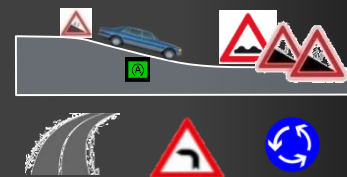
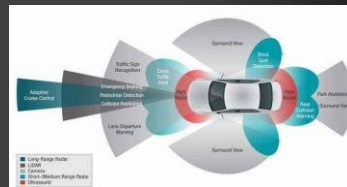


Mercedes Intelligent Drive Offers Advanced Driver Assistance System Close to L3 Autonomous Driving

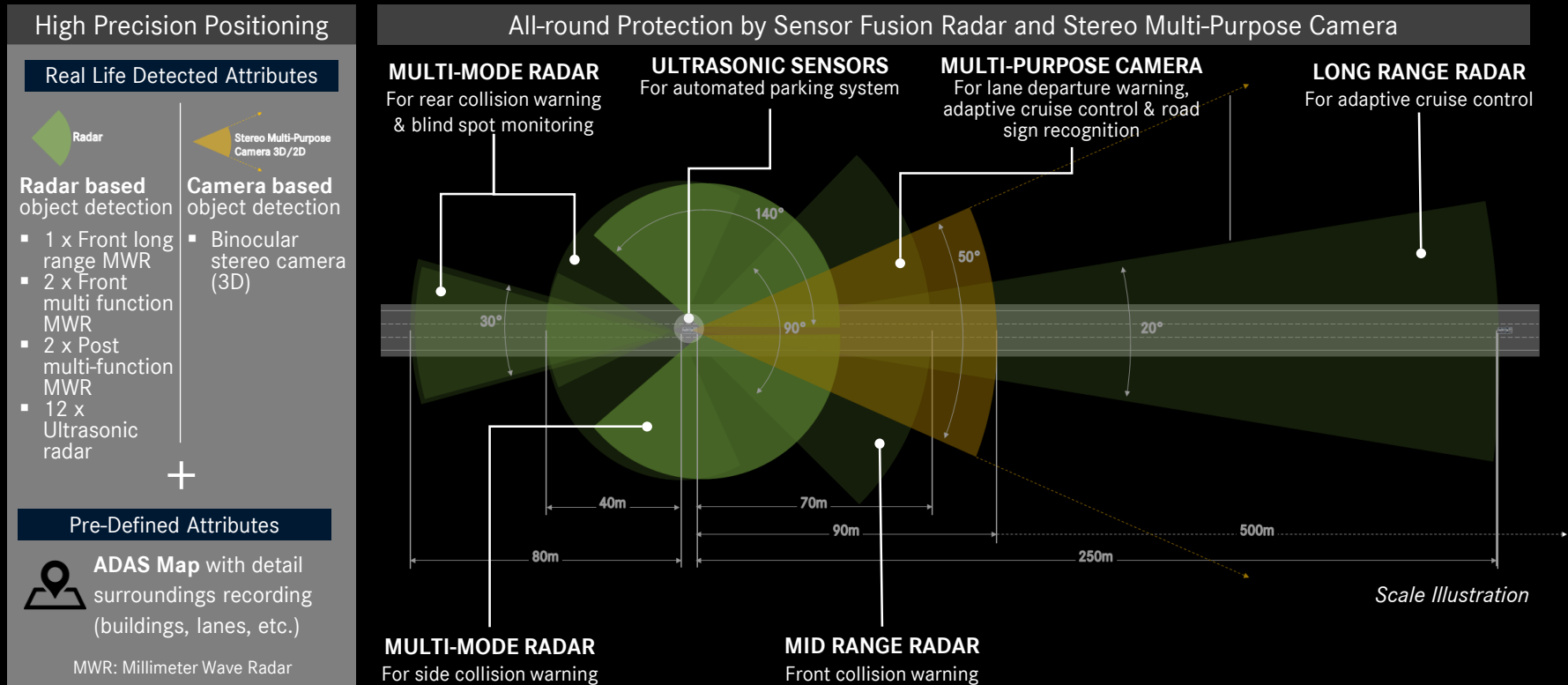
USE CASES



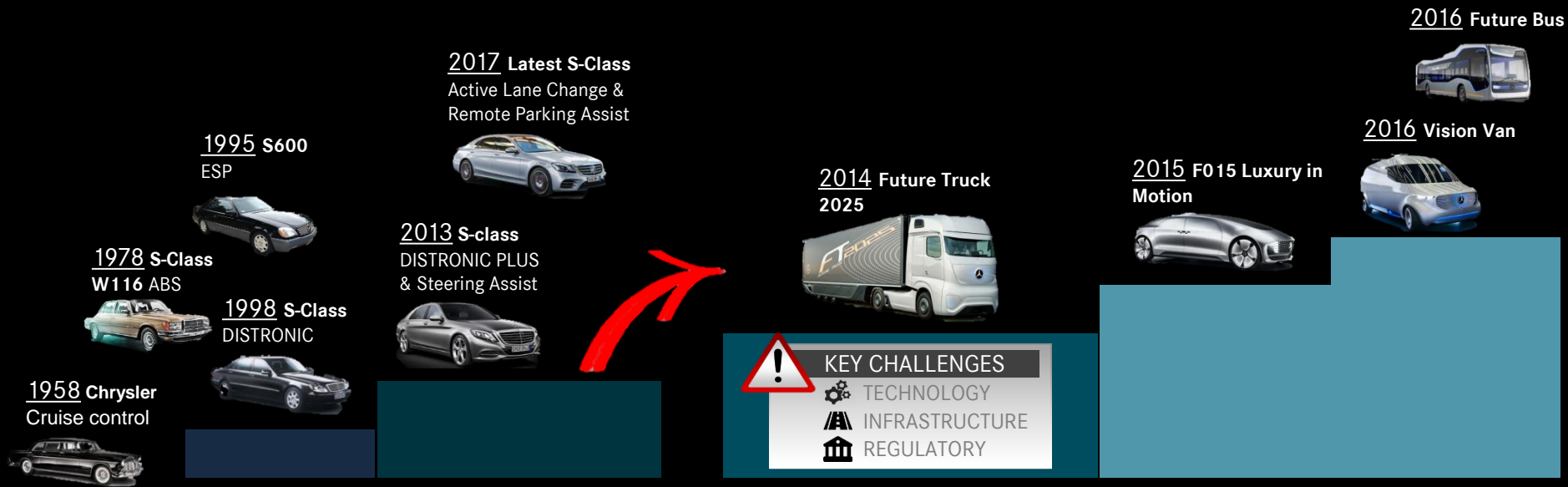
ENABLING TECHNOLOGIES



MB advance environment perception processing ability ensures the highest driving safety



Mercedes-Benz Is the Pioneer in Autonomous Driving



| SAE Level 0 | SAE Level 1 | SAE Level 2 | SAE Level 3 | SAE Level 4 | SAE Level 5 |
|-------------------------------|--------------------------|---|--|--|--------------------------------|
| No Automation | Driver Assistance | Partially Automated Driving | Conditional Automated Driving | Highly Automated Driving | Fully Automated Driving |
| Driver acts in his own person | | Driver observes permanent the functions | System observes it's limits and drops at driver when necessary | System provides full vehicle control. no driver control required | |

Market Introduction AD Technologies

MANAGEABLE

Traffic Environment

COMPLEX

Highly Automated Driving



Highway with far less complicated traffic scenarios

Automated Valet Parking



Limited/Semi-open traffic of low speed urban environment

Urban Area Autonomous Driving



Urban complex traffic

China Adaptation

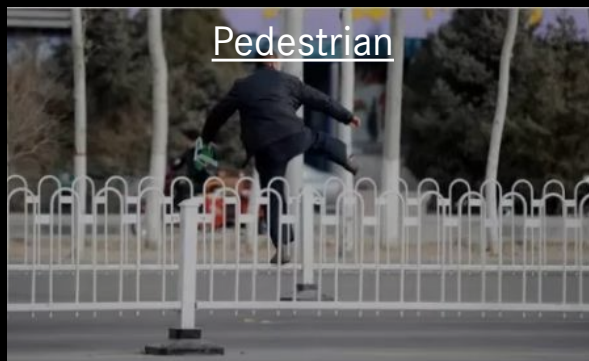
INFRASTRUCTURE

Construction Site



DRIVING BEHAVIOR

Pedestrian



LOCAL SUPPLIER

Positioning Service



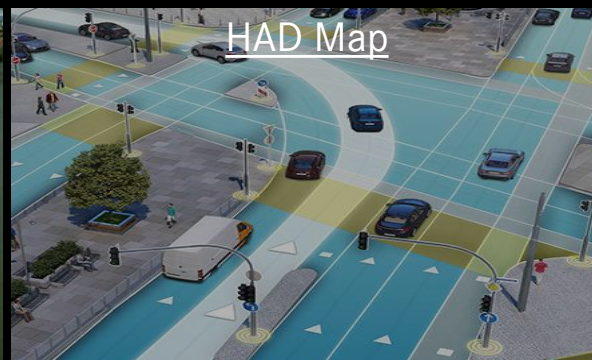
Traffic Light



Cut in Scenario



HAD Map



Automated Valet Parking



TIME SAVING, MORE COMFORT & SAFER

Get to the destination faster, and safer without accidents or damage with driverless in the parking lot



FURTHER SERVICES IN THE PARKING GARAGE POSSIBLE

Service such as car wash, repairing & charging can be provided



HIGHER AREA EFFICIENCY POSSIBLE

A certain parking lot could fill in more vehicles due to the accurate parking by the AVP

Daimler is actively developing AD solutions in China

Daimler and Tsinghua University signed **MoU** to deepen joint **research cooperation** on sustainable transportation in the fields of automated driving and intelligent mobility.



Daimler becomes the **first international OEM** to obtain **Beijing autonomous road testing license** in cooperation with Baidu Apollo project and carries out urban real road test in Beijing Yizhuang.



Daimler and Bosch deepen joint research cooperation on **Automated Valet Parking** with a pilot in Beijing.



Daimler and Baidu to Enhance **Strategic Cooperation** in **Automated Driving and Vehicle Connectivity**.



Different Cooperation Models

ALL ALONE:



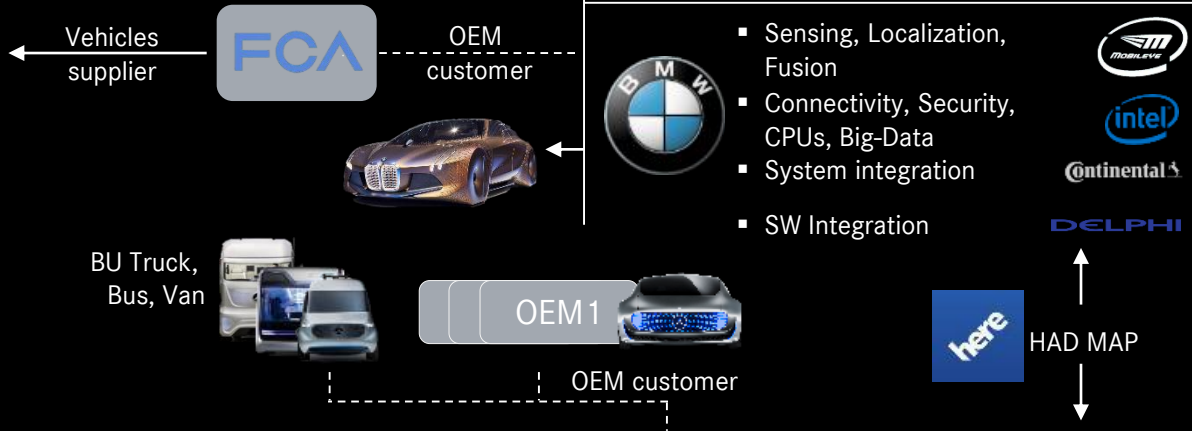
- In House Development excluding vehicle development
- Own sensor development; industrialization still open



OPEN SOURCE PLATFORM:



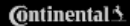
- Baidu Apollo Open Source Alliance
- As of Sep., Apollo acquires 71 partners ranging from OEMs, suppliers to government bodies.



MANY PARTNERS:



- Sensing, Localization, Fusion
- Connectivity, Security, CPUs, Big-Data
- System integration
- SW Integration



HAD MAP

STRONG PARTNER:



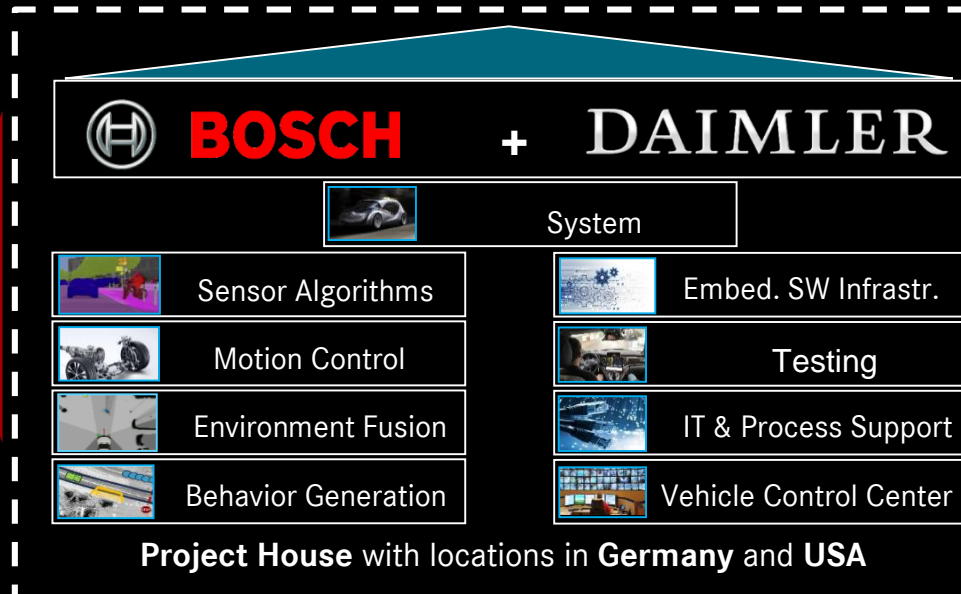
- Joint project house with shared locations: Germany and US
- Cooperation for development of AD-SW (with shared IPs)
- Daimler to provide vehicles, Bosch to provide sensors

Founding Member

Daimler joined forces with Bosch in common Project House to combine strengths of OEM and Tier1



- Hardware (Sensors, Actors, ECUs)
- Software for HW components



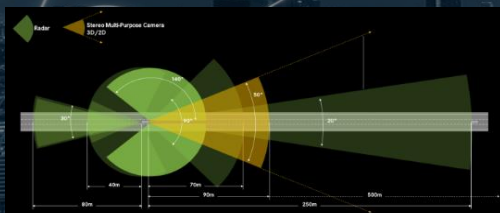
- Vehicles
- Integration of systems in vehicle line

- **Common Development of AD-Kit to be used in Robo Cars**
- **Functionally SAVE acc. to ISO26262**



The New Digital Ecosystem for Autonomous Driving offers Market Opportunities for New Technologies

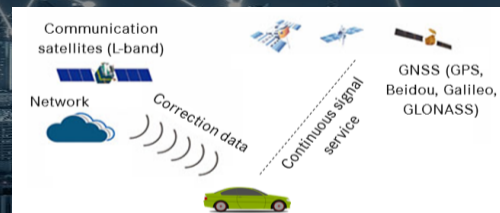
Enhanced Sensors



HAD Maps



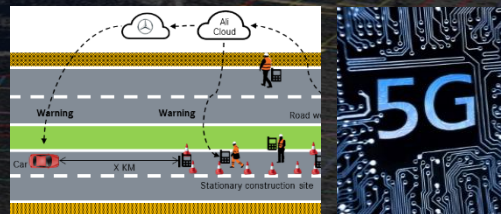
Precise Localization



Reliable Traffic Service



Digital Infrastructure



Computational Power





THANK YOU