



# Dynamic Pass Predictor – A New Driver Assistance System for Superior and Safe Overtaking

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European Commission  
Information Society and Media



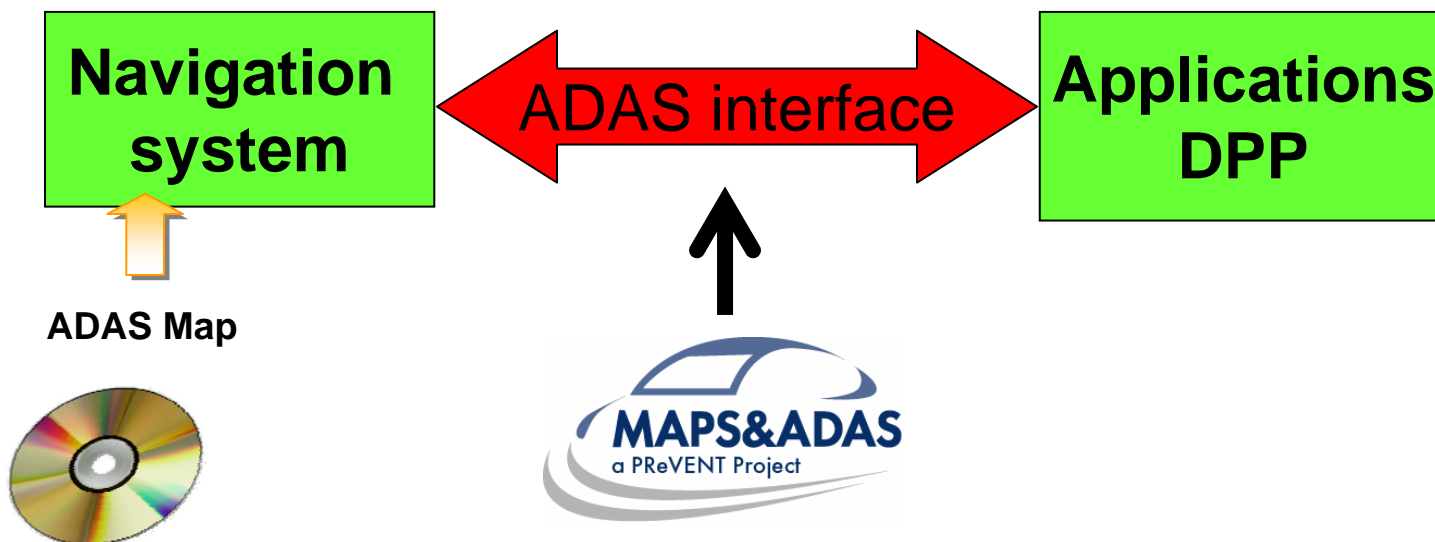
- **Motivation and Overview**
- **New ADAS “Dynamic Pass Predictor (DPP)”**
- **Key features and what is behind DPP**
- **Map and MMI issues**
- **Video**
- **Conclusion**

- **The number of 40,000 casualties per year in Europe is still too high.**
- **On rural roads, overtaking counts for about 10% of all severe accidents.**

# Role of MAPS&ADAS: Overview



- **Map as a sensor**
- **ADAS applications need access to the map data (in navigation systems)**
- **Interface is required**



# Dynamic Pass Predictor (DPP)



**How digital maps can contribute to road safety:**

**New developed ADAS Application:  
“Dynamic Pass Predictor (DPP)”!**

**Has been developed together with NAVTEQ**



**The new system informs the driver where  
overtaking is not recommended.**

**Key and core values:**

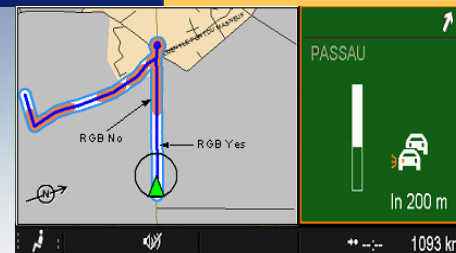
**... Comfort (relaxed driving ...)**

**... Dynamics (overtaking decisions...)**

**... Safety (superior and safe overtaking ...)**

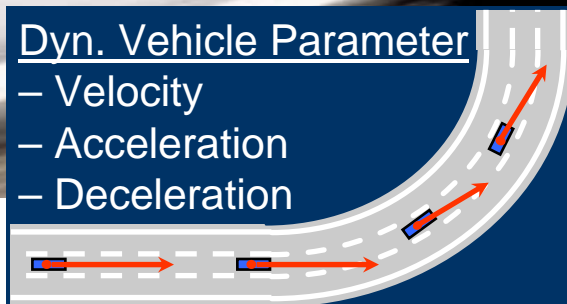
**→ higher safety in road traffic!**

# System components used



## Dyn. Vehicle Parameter

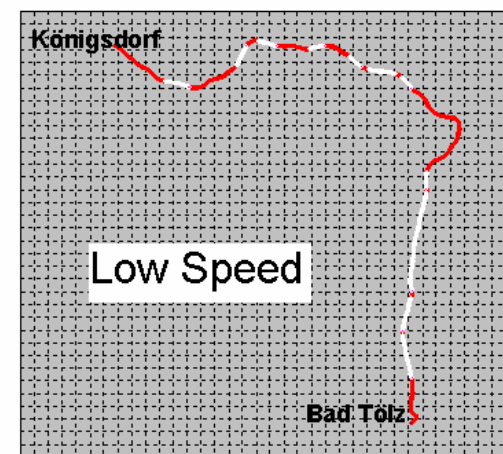
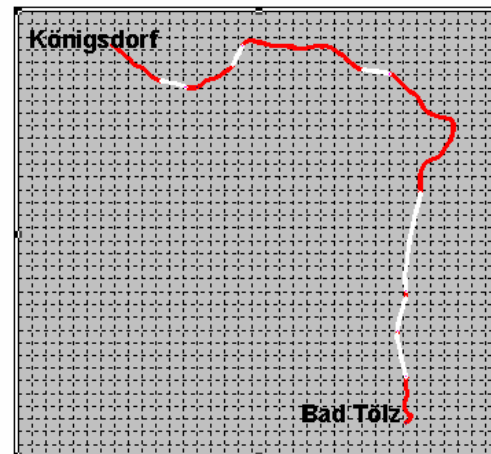
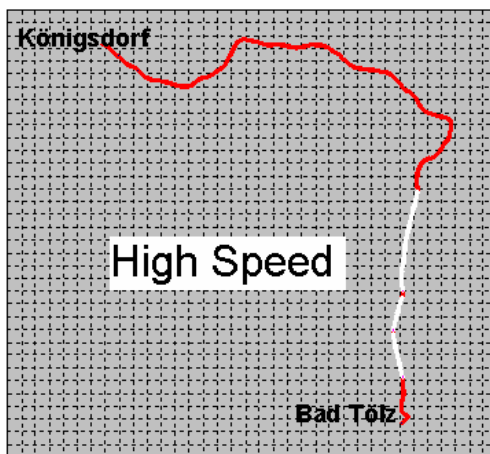
- Velocity
- Acceleration
- Deceleration



# Required passing way

Different ADAS Horizons dependent on speed and acceleration values.

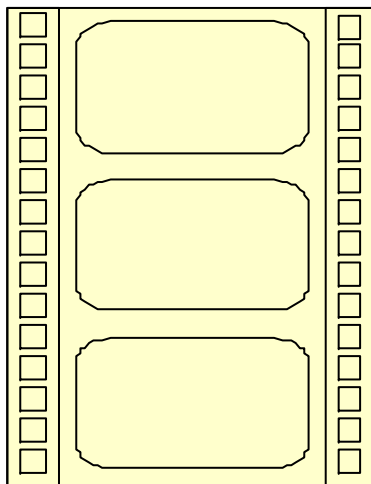
Examples: Orange sections indicate where **overtaking is not recommended**.



# Map and MMI Issues



# Dynamic Pass Predictor (DPP): Video



# Conclusion



...outlined the new driver assistance system  
“Dynamic Pass Predictor”.

...the new assistance system informs the driver  
where **overtaking is not recommended**.

...by using the system before overtaking situations  
a safer, more comfortable and superior driving is  
achieved.

**A test drive is possible on the testtrack.**



## Thank you for your attention

More information, please visit web site

*[http://www.prevent-ip.org/maps\\_adas](http://www.prevent-ip.org/maps_adas)*

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