# New, Innovative Telematics Applications to improve Road Safety & Traffic Management





# **Passive Safety: RESCUE Chain**



Improving the efficiency of the Rescue Chain

**Emergency** 









**PSAP 2** 













Local Danger



**Virtual Cone** 

Renault / AXA Assistance

Assistance Fleet Management

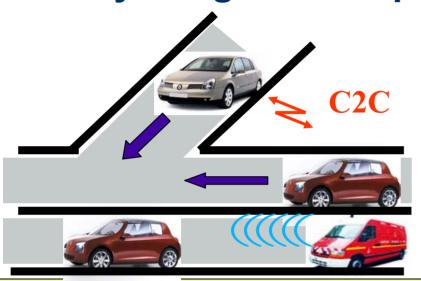




# **Active Safety:**



Safety Margin Concept



#### **Requirements:**

- Accurate relative positioning
- Dynamic MAP up-date
- Local Danger Warning
- Blue Wave / Virtual Cone







# **Active Safety:**



# Car to Road Side Infrastructure Applications



#### **Information Geocasting:**

- Road Sign repetition
- Utilitary information
- Local road dangers
- Dynamic Speed Limits
- Car status (stolen Vehicle)

#### **Head-up Display**





# **Traffic Management Support**



# EFCD for an Efficient traffic management



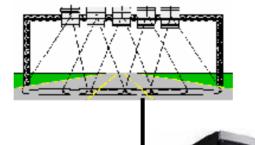












GSM / UMTS /....













### Standardization is a must



- The diversity of actors and the complexity of the automotive telematic system requires a standardization approach at the level of interfaces between main subsystems (communication & application protocols).
- The C2C and C2I deployment requires the allocation of a protected bandwidth (2x10 Mbits/sec) free of charge for Road safety services (which can not be sold to customers). The IEEE 802.11p proposal in the 5.9 Ghz Band is currently the best candidate.
- Consequently, the proposed telematics applications are only viable if a converging, common, global European approach can be achieved.

# **Any Questions?**





RENAULT Gerard.segarra@renault.com