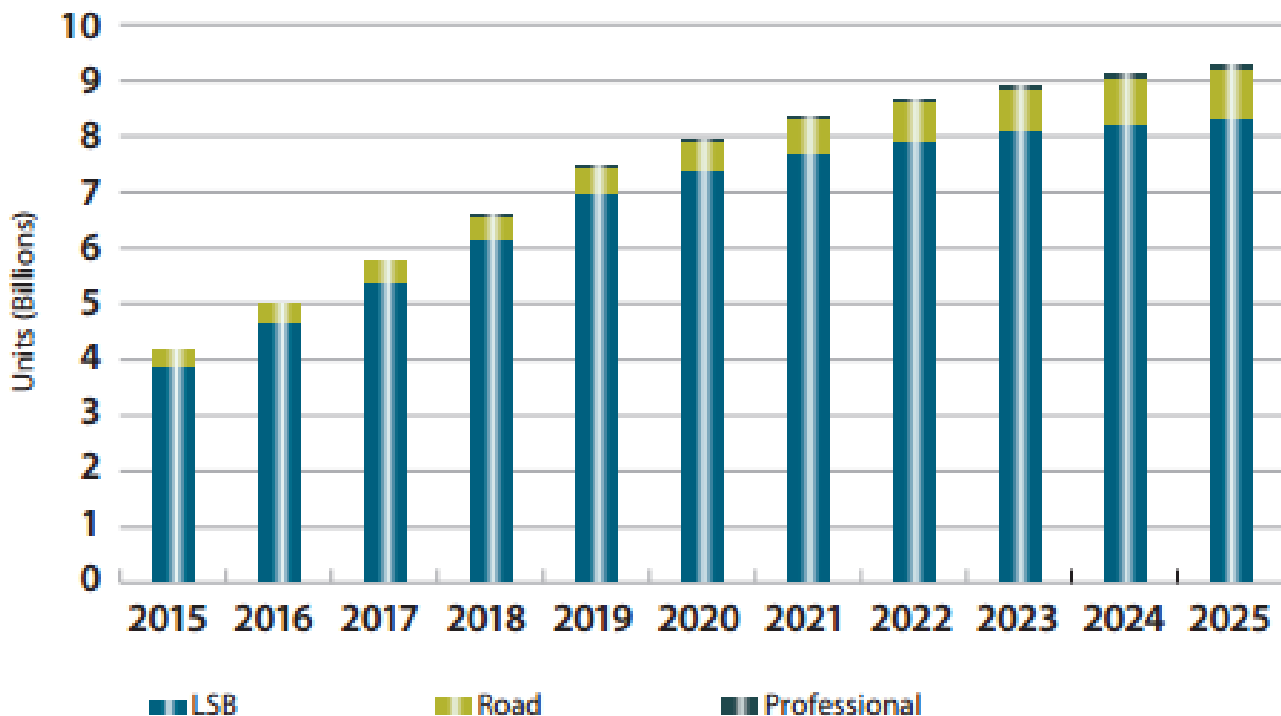


# European Navigation: MULTI-SECTORIAL DOWNSTREAM MARKET

Global installed base by segment

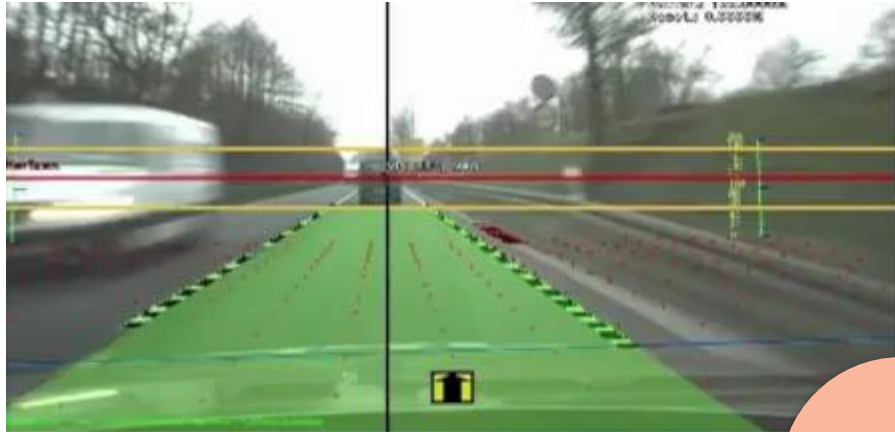


## Global revenue through GNSS downstream market

- In 2018 - € 130 Billions
- € 80 B for added-value services
- € 50 B for devices and augmentation services
- Expected by 2025 : € 250 Billions

Nearly 50,000 annual jobs for the European Industry

# GNSS is the core technology in autonomous vehicles

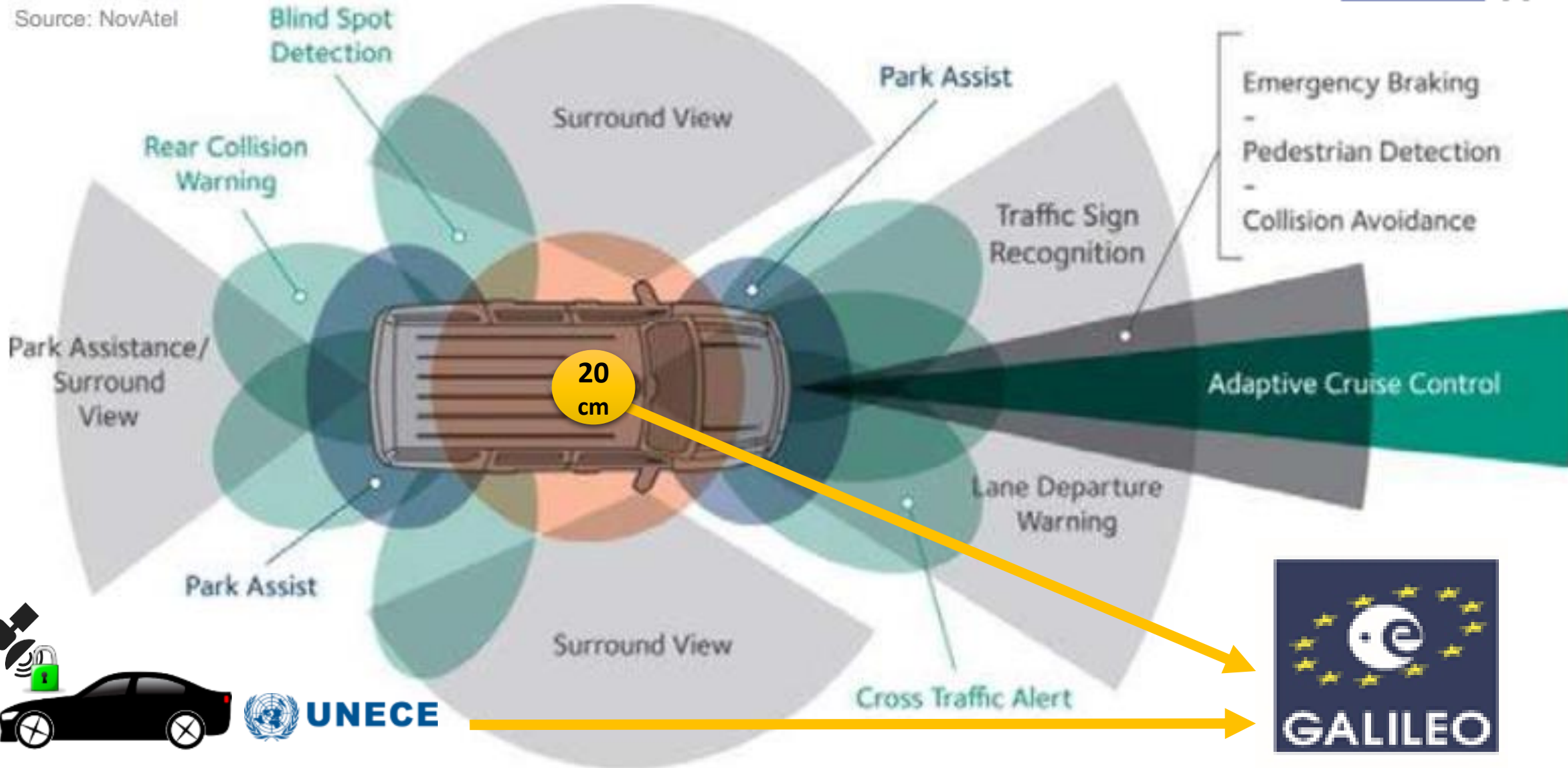


GNSS

# GNSS is the core technology in autonomous vehicles



Source: NovAtel



**UNECE**



# Galileo is crucial for the automotive industry in the design of Cooperative and Autonomous Mobility



- **European car manufacturers and suppliers associations, ACEA and CLEPA, have stressed publicly the importance of GNSS and specifically the contribution of Galileo to achieve the required level of accuracy and security**

*“GNSS is essential for the automated cars industry. Being able to determine the position of vehicles will enable predicted driving and increase security”*

*“The **positioning accuracy of 20 cm from Galileo** will be essential in urban areas”*

**Joost Vantomme, Director in the European Car Manufacturers Association (ACEA)**



*\* Source: EuroActiv, December 2018*

**BMW and General Motors/Cadillac autonomous vehicles models expected in 2021 will be Galileo compatible**

**... and many others (e.g. Daimler, Fiat-Chrysler, Scania, Renault, Volkswagen,...) confirmed the interest to test the Galileo High Accuracy and Authentication once available**



*Source: Continental AG*