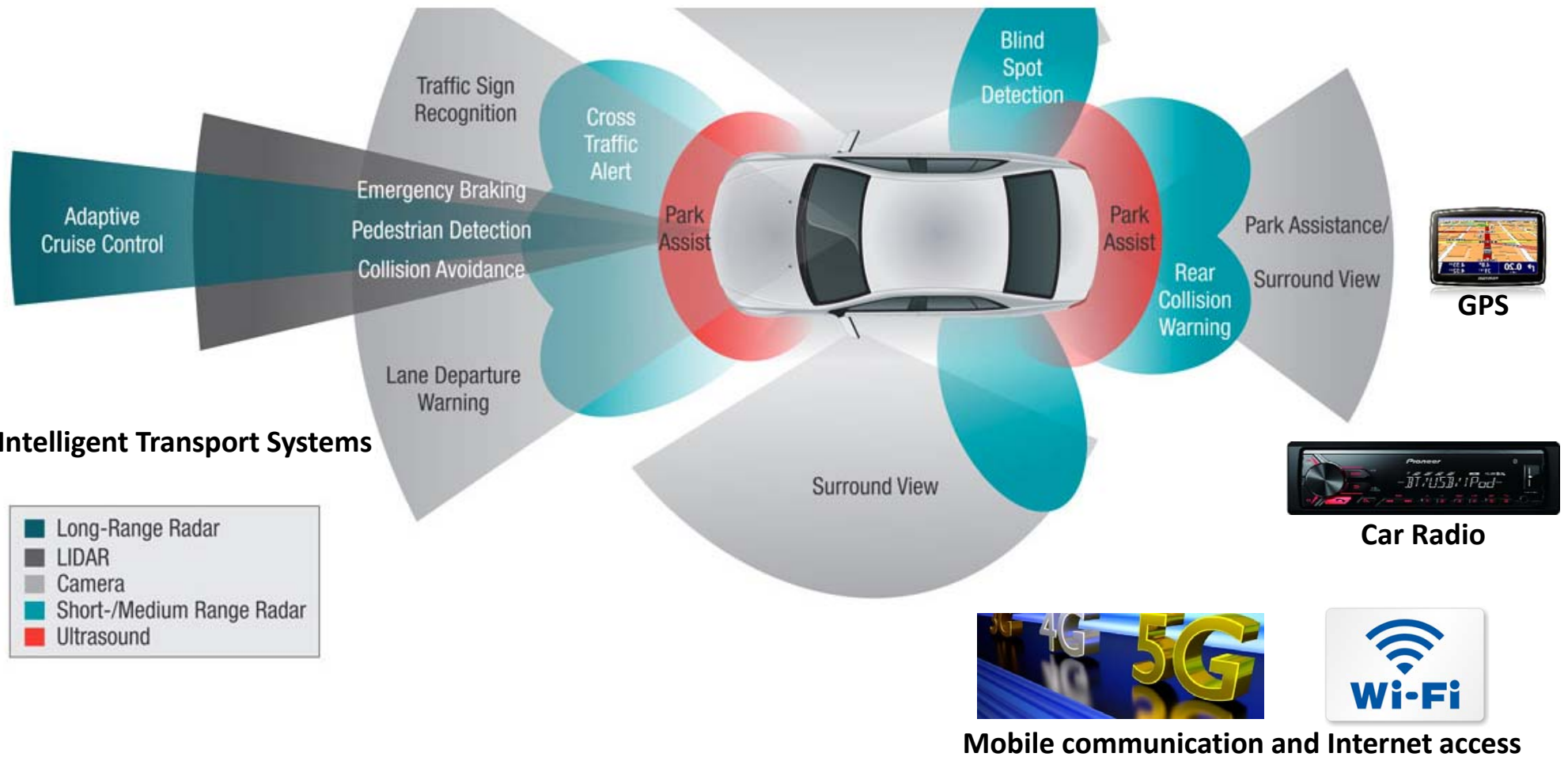# 2ⁿᵈ United Nations Coordination Meeting for Road Safety

Geneva, 3 November 2017
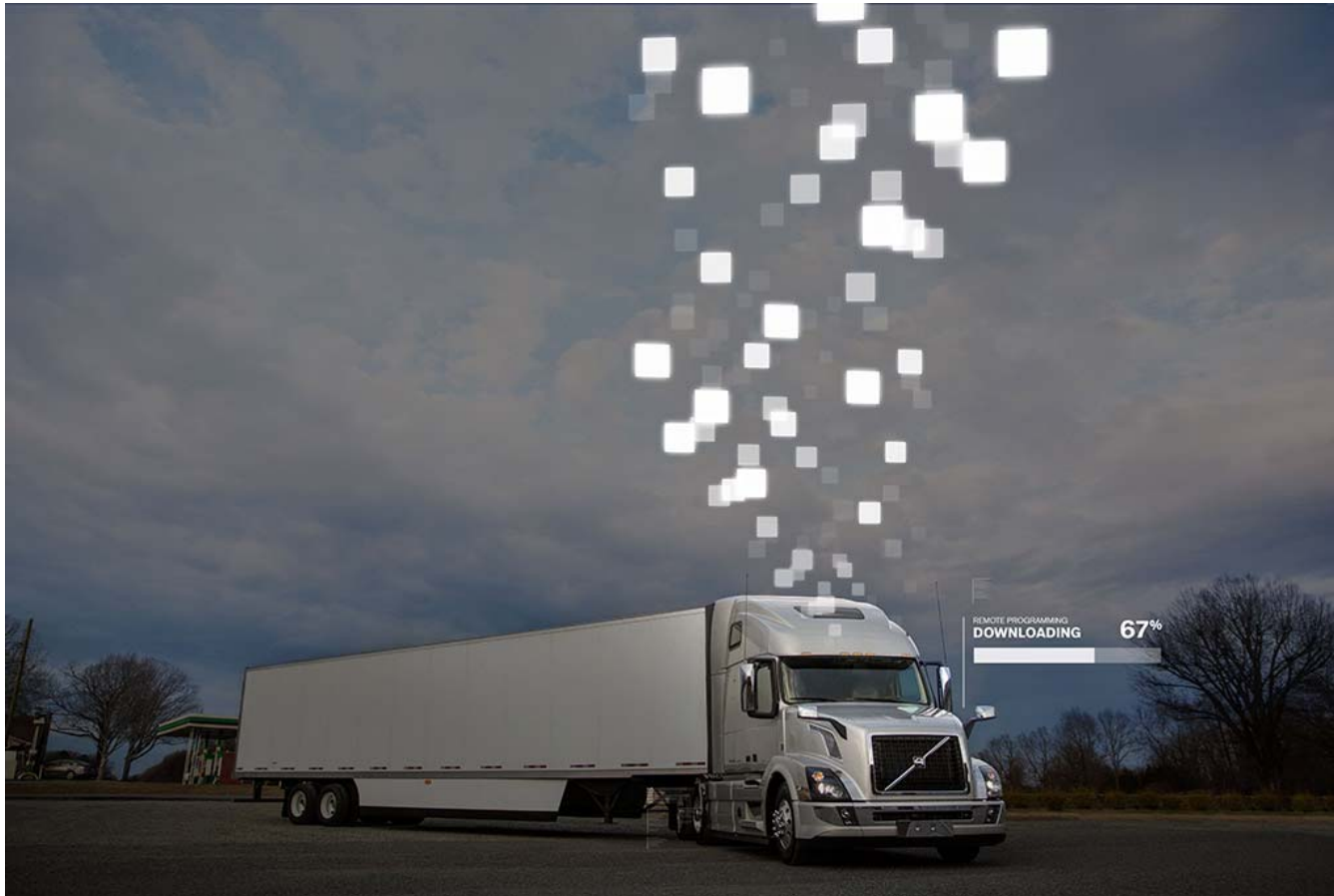

Reinhard.Scholl@itu.int

ITU allocates spectrum for vehicles

Intelligent Transport Systems

Traffic Sign Recognition

Cross Traffic Alert

Blind Spot Detection

Adaptive Cruise Control

Emergency Braking

Pedestrian Detection

Collision Avoidance

Park Assist

Park Assist

Park Assistance/ Surround View

Rear Collision Warning

Lane Departure Warning

Surround View

- Long-Range Radar
- LIDAR
- Camera
- Short-/Medium Range Radar
- Ultrasound

GPS

Car Radio

Mobile communication and Internet access

ITU standards secure over-the-air software updates for vehicles

ITU standards improve quality of hands-free communication in vehicles

https://www.youtube.com/watch?v=x4dtjvLHXds

ITU standards make e-calls intelligible
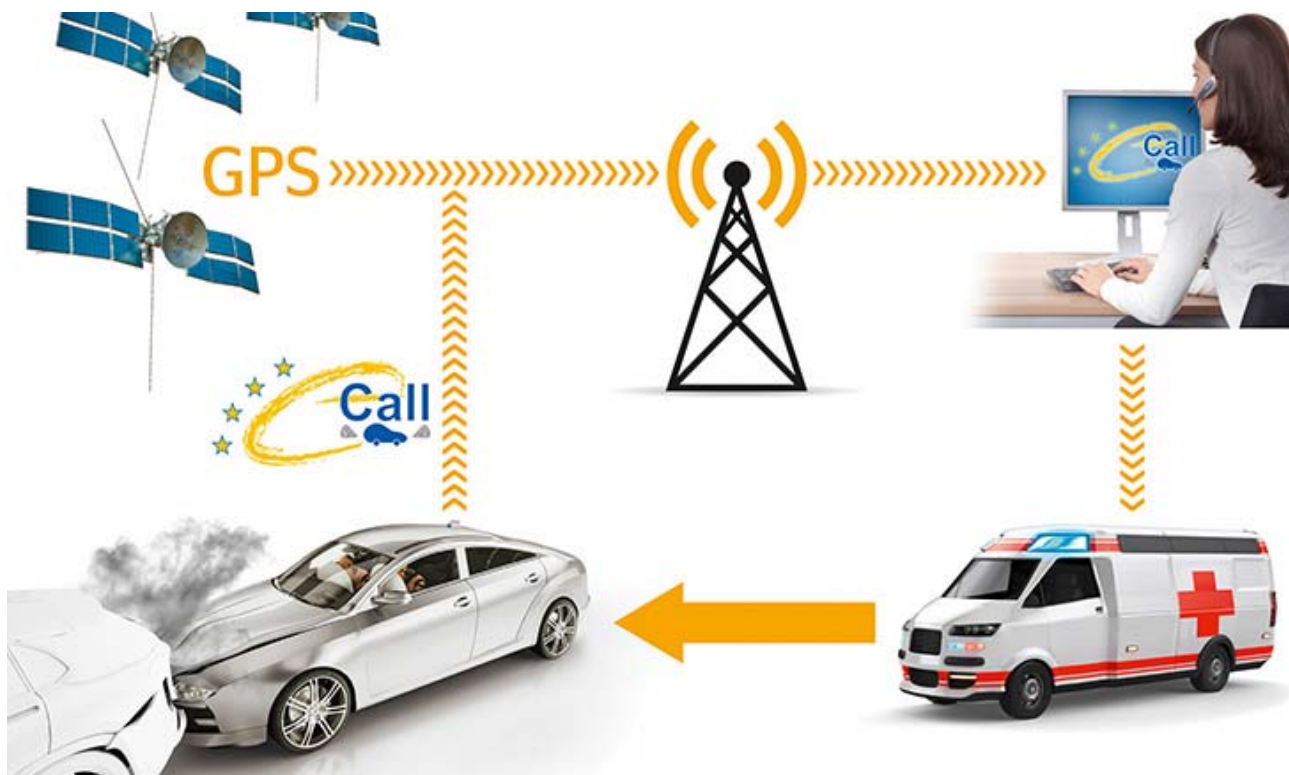
Source: Continental - Automatic Emergency Call

Join 13th edition of FNC @Geneva Motor Show

ADDITIONAL SLIDES

Standardization work done in multiple groups

Telecommunication Standardization Sector (ITU-T)
- Study Group 17 : ITS and automotive cybersecurity (remote SW update)
- Study Group 16 : vehicle gateway platforms
- Study Group 12 : Quality of Service in vehicle communication

Radiocommunication Sector (ITU-R)
- Radiocommunication interfaces and systems for ITS applications

WHAT is FNC?

The Future Networked Car Symposium, organized by ITU and UNECE is held on the first public day of the Geneva International Motor Show.

The Symposium will explore the relationship between vehicle communications (V2V, V2X) and automated driving analysing the crucial roles of **connectivity**, **cybersecurity**, **blockchain**, **virtual reality** and **artificial intelligence**.

WHO WILL BE THERE?

This Symposium brings together representatives of **vehicle manufacturers**, the **automotive** and information and communication technology **(ICT) industries**, **governments** and their **regulators**.
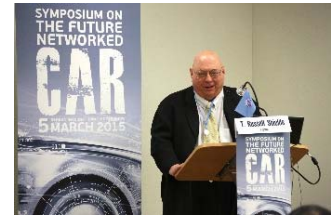
FNC TESTIMONIALS

*"The Fully Networked Car is a **can't-miss event**. FNC is the right people coming together in the right place at the right time to **discuss the right issues**."*
Roger Lanctot - Director, Automotive Connected Mobility,
Global Automotive Practice, Strategy Analytics

*"ITU, as a UN agency, does a good job of doing **honest standards**."*
T. Russell Shields
Chair, Ygomi

*"The **FNC is an excellent platform** where auto-manufacturers, security experts and policymakers can discuss the **vital security concerns** related to connected and autonomous vehicles."*
Arnaud Taddei - Director, Standards and Architectures,
Digital Service Providers Office of the CTO, Symantec

*"Widely accepted **standards are the basis for future regulations** that will provide the basic legal playing field for introducing all these new technologies in our markets."*
Walter Nissler – Officer-in-charge, Sustainable Transport Division, UNECE

PREVIOUS FNC PARTICIPANTS

- Attracts over 150 participants from 25 countries

- Industry analysts, policy makers, regulators, road safety advocates, standards makers

- A unique cross-section of the automotive and ICT sectors

ITU and Vehicle Connectivity:
Yearly Events (EUROPE, ASIA, AMERICA)

Yearly events in America and ASIA

Opportunities for Collaboration

Collaboration on ITS Communication Standards (CITS)

- Established by the ITU to provide a Platform to share knowledge and coordinate ITS standardization
- Attended by worldwide SDOs
- Three meetings x year, back to back with the ITS-related regional events:
  Asia (~June), America (~Dec.) Geneva (~March)
- Aims for a coordinated set of interoperable ITS Standards

http://itu.int/go/ITScomms