

“We make the world a safer place.”

We verify **vehicle to “anything” technology** and help save lives.

Current situation

V2X – Vehicle to anything



2021 V2V

Vehicle to Vehicle:

- Alerts one vehicle to the presence of another.
- Cars „talk” using DSRC technology or LTE Rel 14.

2022 V2D/V2P

Vehicle to Device / Vehicle to Pedestrian:

- Vehicles communicate with cyclists’ V2D device and vice versa.
- Car communication with pedestrian with approaching alerts and vice versa.
- Pedestrian safety
- 500 mil Smartphone users in the EU

2019 V2H

Vehicle to Home:

- Vehicle will act as supplement power supplies to the home.
- Cars „talk” using DSRC technology or LTE Rel 14.

2020 V2G

Vehicle to Grid:

- Smart grid controls vehicle charging and return electricity to the grid.
- 75% of cars built with internet connectivity by 2020.

2022 V2I

Vehicle to Infrastructure:

- Alerts vehicles to traffic lights, traffic congestion, road conditions, etc.

Did you know?

Using V2X in addition to current ADAS solutions will increase potential **accident coverage from 60% to 96%**.

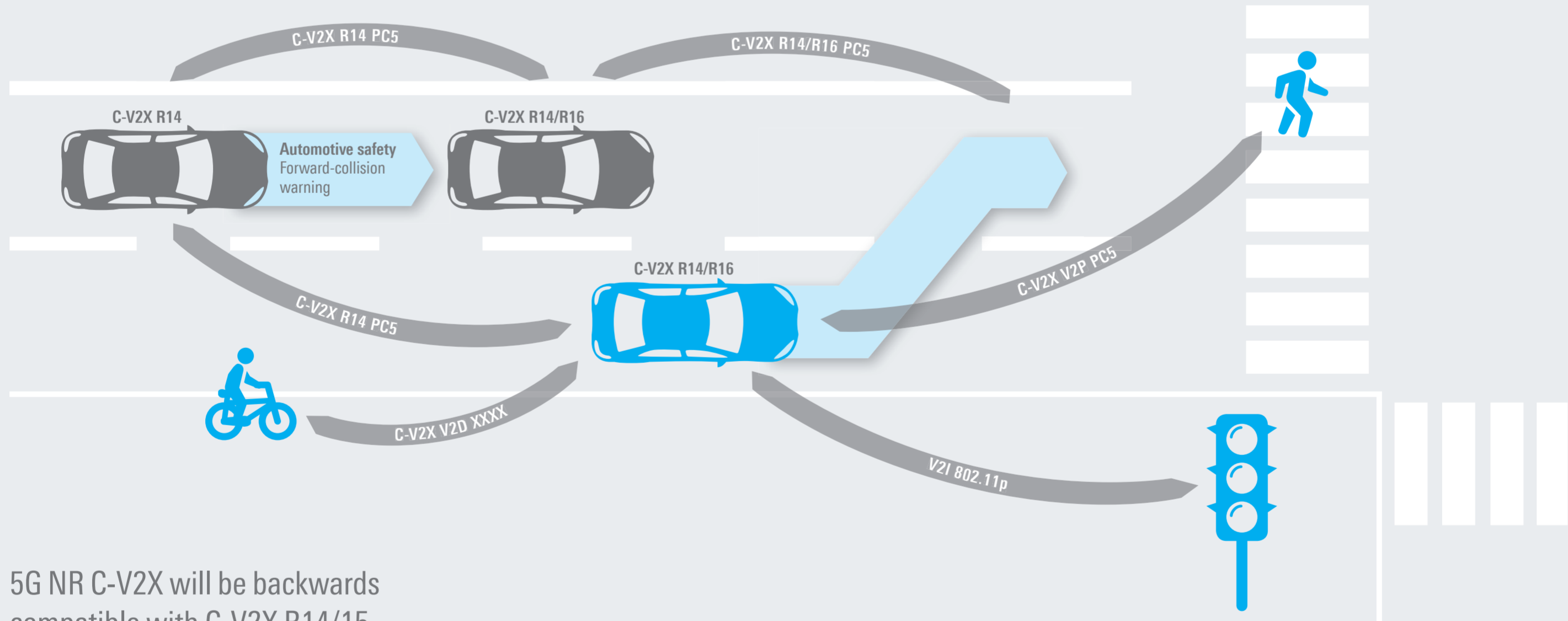
80% of T-junction accidents could be avoided if V2X technology is used.

Platooning has been shown to **save up to 20% fuel**.

Future vision

5G NR C-V2X

brings about complementary capabilities for autonomous driving



5G NR C-V2X will be backwards compatible with C-V2X R14/15

Our expertise

Started pioneering work in

1933

300 launches a year

70 locations worldwide

More than **85** years of experience

11,000 employees worldwide

Our contribution – generating signals for today and tomorrow

Conformance und performance tests with

R&S® CMW
wideband radio communication tester

R&S® SMW200A
vector signal generator



We make the world a safer place.

For more information, visit our website:

www.rohde-schwarz.com/NextGeneration-V2X