GSMA

5GAA
Automotive Association

IoT WebTalk

How Can **C-V2X**

Create an Environment that Improves Quality of Life for Everyone?

The Socio-Economic Benefits of Connected Vehicles

Road Traffic Accidents

- In the top 10 causes of death globally across all age groups
- 1.35 million lives lost every year
- Over 90% of vehicle collisions caused by human error

Over 500 Million Connected Cars on the Road by 2025

Yearly Benefits of Connected Cars by 2025

- 11,000 lives saved
- 260,000 fewer accidents
- 400,000 tones of CO_2 emissions avoided
- 280 million hours of driving saved

Sources: Bosch, 2017 | Ericsson, 2019 | U.S. DOT, 2016 | WHO, 2018

The Socio-Economic Benefits

- Increased safety for all traffic participants
- Improved traffic flow and reduced congestion
- More efficient driving
- Fewer emissions for a healthier environment
- New value-added services
- A more convenient lifestyle
- Improved quality of life for citizens

The Market Opportunity of Connected Vehicles

831 million
automotive connections by 2027*

USD 9 billion
connectivity revenue by 2027

USD 81 billion
connected vehicle services revenue by 2030**

20% of all IoT connections

49% of traditional cellular IoT connections

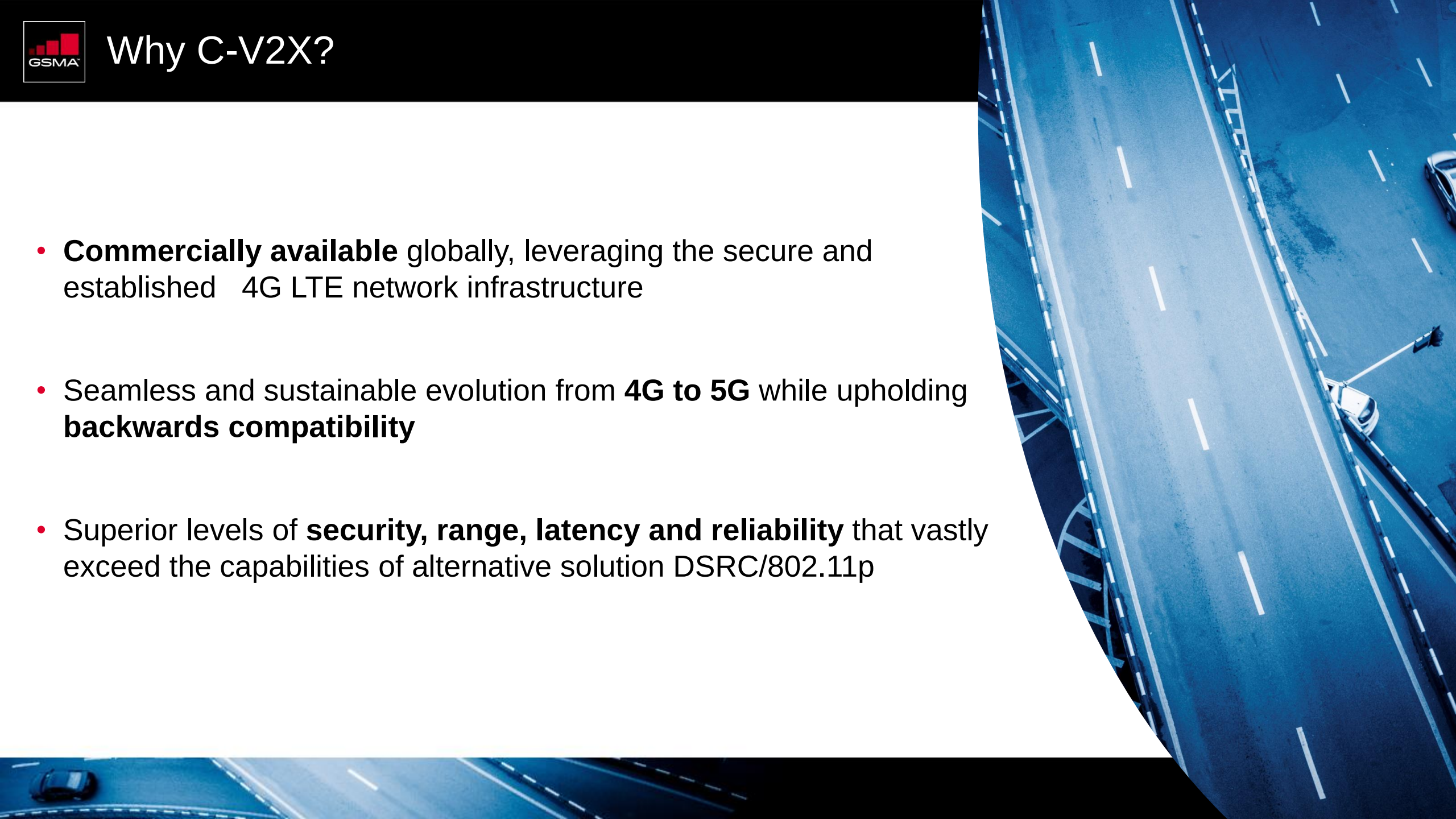
53%
of traditional cellular IoT revenue

* incl. those made by embedded SIMs and aftermarket devices in passenger vehicles | ** in US, Europe and China

Sources: Analysis Mason, 2019 | Strategy&, PWC, 2019

Why C-V2X?

- **Commercially available** globally, leveraging the secure and established 4G LTE network infrastructure
- Seamless and sustainable evolution from **4G to 5G** while upholding **backwards compatibility**
- Superior levels of **security, range, latency and reliability** that vastly exceed the capabilities of alternative solution DSRC/802.11p



Why C-V2X?

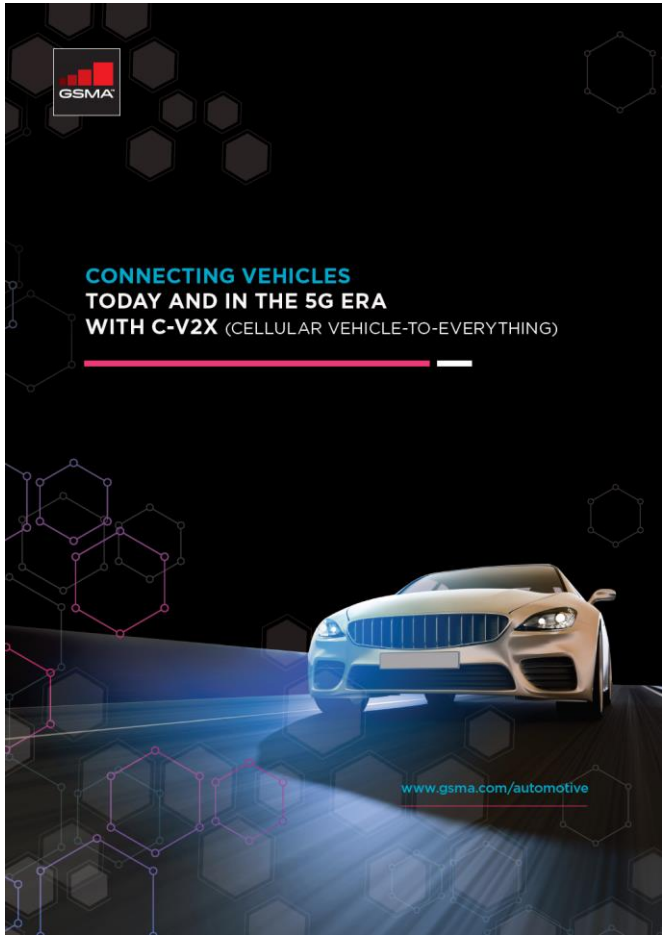
- Backed by a **global ecosystem** of 130+ leading mobile operators, vendors, automotive manufacturers, suppliers and companies from the wider industry

- C-V2X **security** is based on internationally recognised interoperable standards leveraging the security services provided by mobile networks, including eSIM

- **Mobile operators** are the experienced, trusted and licensed providers of an already established network infrastructure and are best placed to provide and manage connected vehicle solutions with the necessary scale, coverage, reliability and end-to-end security

What is the GSMA doing?

- The GSMA is working with mobile operators, automotive OEMs and suppliers, industry associations and regulatory bodies to accelerate the growth of the connected vehicle market by agreeing a common approach to security, regulatory and infrastructure solutions.
- To find out more, visit www.gsma.com/automotive



Agenda

10 min	**C-V2X: Today and Next Steps**	Maxime Flament, CTO, **5GAA**
5 min	**Building Partnerships to Enable Connected Mobility**	Luke Ibbetson, Head of Group R&D, **Vodafone**
5 min	**Connected and Automated Driving – Cellular Ecosystem Approach**	Joachim Goethel, Senior Manager Project 5G Alliance, **BMW**
5 min	**Enabling the C-V2X Ecosystem**	Steve Schwinke, Global Head of Connected Vehicles, **Tech Mahindra**
30 min	**Interactive Panel and Q&A**	Maxime Flament, CTO, **5GAA** Luke Ibbetson, Head of Group R&D, **Vodafone** Joachim Goethel, Senior Manager Project 5G Alliance, **BMW** Steve Schwinke, Global Head of Connected Vehicles, **Tech Mahindra** **Moderator:** Dr Shane Rooney, Executive Director IoT Networks, **GSMA**