The 5GAA, bridging the automotive and ICT Industries

5GAA
Automotive Association

Luke Ibbetson, R&D Director, Vodafone Group
5GAA Board Member

**5GAA connects the telecom industry and vehicle manufacturers
to work closely together for developing end-to-end solutions for future mobility
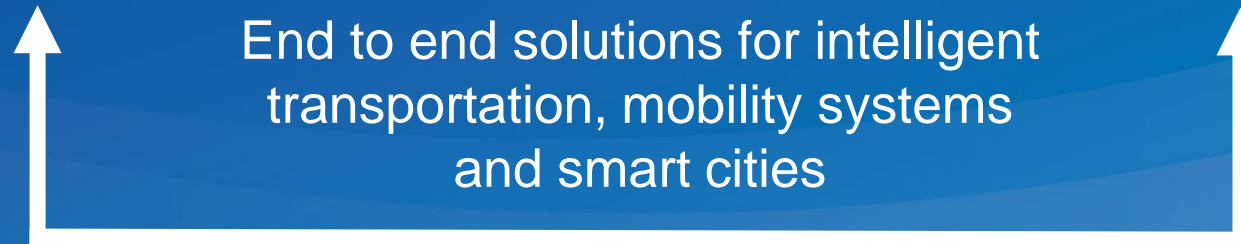and transportation services**

AUTOMOTIVE INDUSTRY

Vehicle Platform, Hardware
and Software Solutions

TELECOMMUNICATIONS

Connectivity and Networking
Systems, Devices and
Technologies

End to end solutions for intelligent
transportation, mobility systems
and smart cities

From 8 founders in 2016 to >70 companies in Q1 2018

Cellular Vehicle-to-Everything (C-V2X)

Allows vehicles to communicate with each other (V2V) and the wider transport ecosystem (V2P, V2I, V2N

C-V2X is a **unified technology platform** including:

- Short range direct communications (LTE-V2X PC5)

- Long range cellular network communications (LTE-V2X Uu)

C-V2X illustrated with "slippery road" use case

Uu   **Uu**   **PC5**

C-V2X long range cellular network communications

C-V2X short range direct communication
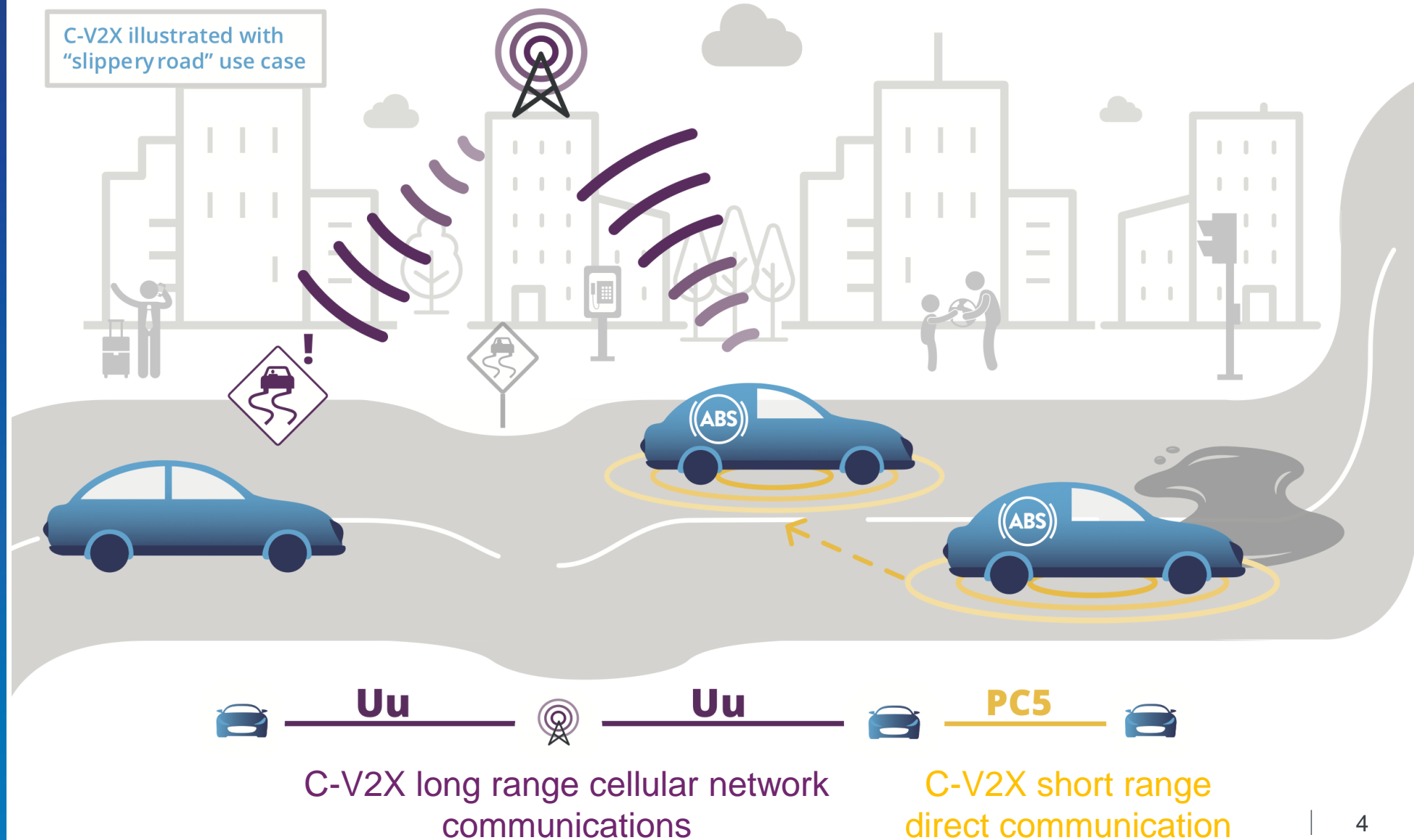
5GAA's EU policy recommendations for C-ITS

Legislation to specify connectivity requirements for C-ITS (including any 'hybrid approach' which equates 802.11p with short range applications and cellular with long range applications) would run contrary to the principles of the ITS Directive and go against the core principle of **technology neutrality** in Europe.

A policy of co-existence should be favoured. A study carried out for the 5GAA shows that **co-existence** of **802.11p** and **C-V2X** at 5.9 GHz would deliver the highest **socio-economic benefits** (€43 bn), compared to scenarios where only one technology is **mandated**.

Reduced infrastructure deployment costs arising from re-use of existing mobile infrastructure are a further key benefit of C-V2X, leveraging cellular technology integration and economies of scale, rather than building independently operated roadside infrastructure.

Such an approach facilitates an **evolutionary path towards 5G** which represents the future of connected, cooperative and automated mobility.

5GAA Strategy

Joint Ecosystem
Create a joint eco system **car – smartphone - home**

Vehicle to Smart Device
V2X-based vehicle interface for smartphone controlled functions

Push V2N
Intense functional rollout of **V2N based applications** in order to reach broad penetration fast

Mobile Edge Computing
Mobile Edge Computing as one of the **key elements of the connected future**

New Radio
"Define the next step" - accelerate definition of **5G-V2X** based on 5G New Radio
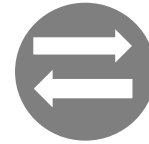
Interoperability
Make sure that **cross OEM** cars and **cross operator** networks **can „speak" with each other**

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Thank you !

For more information please contact:

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