UNECE Working Party WP29 ITS and road vehicles

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History of ITS and WP29

WP29 - ITS Informal group established in 2002 - responding to the Inland Transport Committee request for a *roundtable event.*

A highly successful ITC *Roundtable* held in Spring 2003.

WP29 recognises the importance of "ITS" and retains the informal group as a means to inform delegations and to identify emerging issues for vehicle regulation

History of ITS and WP29

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WP29 retains the central ITS focus within UNECE until ~2008 when a strategic approach was adopted across modes.

WP29 continues the ITS informal as an outreach group, linking with the international research groups IHRA. Developing and publishing guidelines and advice.

Guidelines on:
- Human Machine interaction
- ADAS
- Driver in the loop,
- High priority/safety critical driver warnings

The ITS- Automated driving group

- **In 2014 WP29 refocussed the group to lead strategic issues on vehicle automation (ITS-AD)**

- **Lead on**
  - **Cyber security and software security;**
  - **Taxonomy and definitions**
  - **First initiative to develop regulations for "automated or highly automated" vehicles – the AutoVeh programme.**

The ITS Informal & GRVA

- **Spring 2018 - ITC requested WP29 to ensure delivery on the rapidly changing market introduction of intelligent/automated vehicles.**

- **WP29 refocussed GRRF to GRVA (Experts Group on Vehicle Automation) – agreed in June 2018 and first meeting in September.**

- **November 2018, ITS-AD returns to its previous coordinating role within WP29 for Intelligent Transport Systems (ITS informal).**

WP29 - ITS Informal

- **Next meeting in 2019 linked to WP29.**

- **Issues will be:**

  - **liaison with ITU & Connected Car event - linked to the Geneva Motor Show in March 2019.**

  - **Mobility as a Service (HMI interest)**

  - **Connectivity**

Why are we interested in Connectivity?

ANDY GREENBERG SECURITY 07.21.15 06:00 AM

HACKERS REMOTELY KILL A JEEP ON THE HIGHWAY—WITH ME IN IT

THESE cars can be hacked in SECONDS - Do YOU own one of them?

DRIVERS who own cars which have keyless entry systems could be at risk from hackers who are using devices that can be purchased on Amazon and eBay to break into vehicles.

Why are we interested in Connectivity?

Automakers want Juncker to accelerate car communications decision

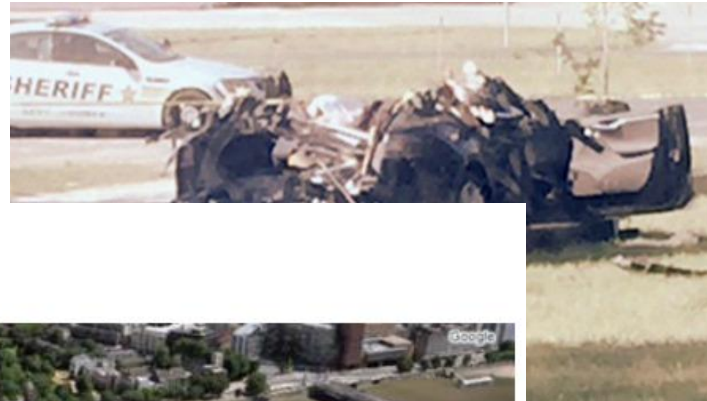The industry and the Commission are both split over which standard to use for connected cars.

Wi-Fi-based communications, rather than waiting for next-generation 5G mobile technology…

EU - eCall Directive…… "connectivity ready" …………. a dormant SIM card already fitted….

Why are we interested in Software or Security?

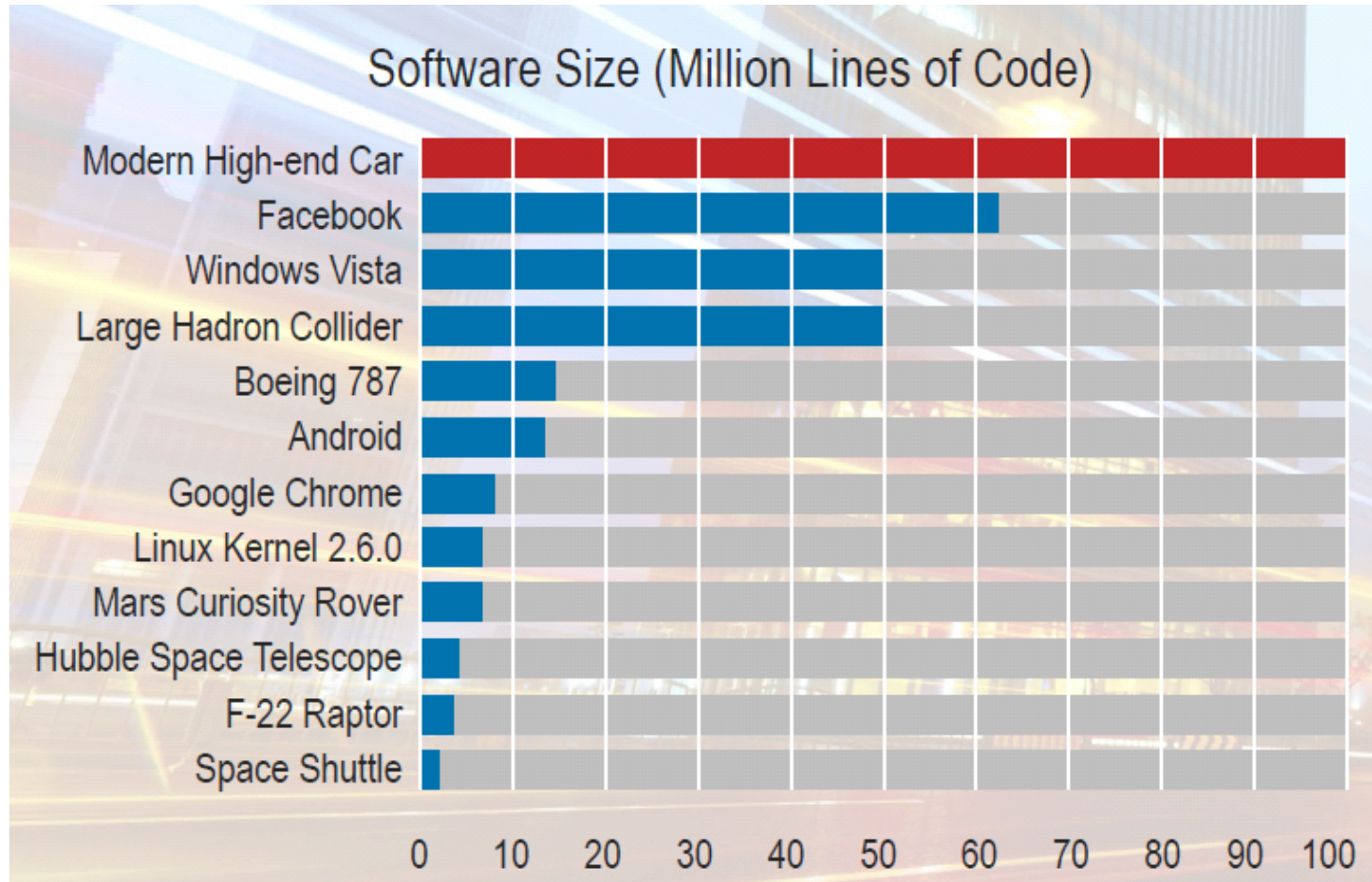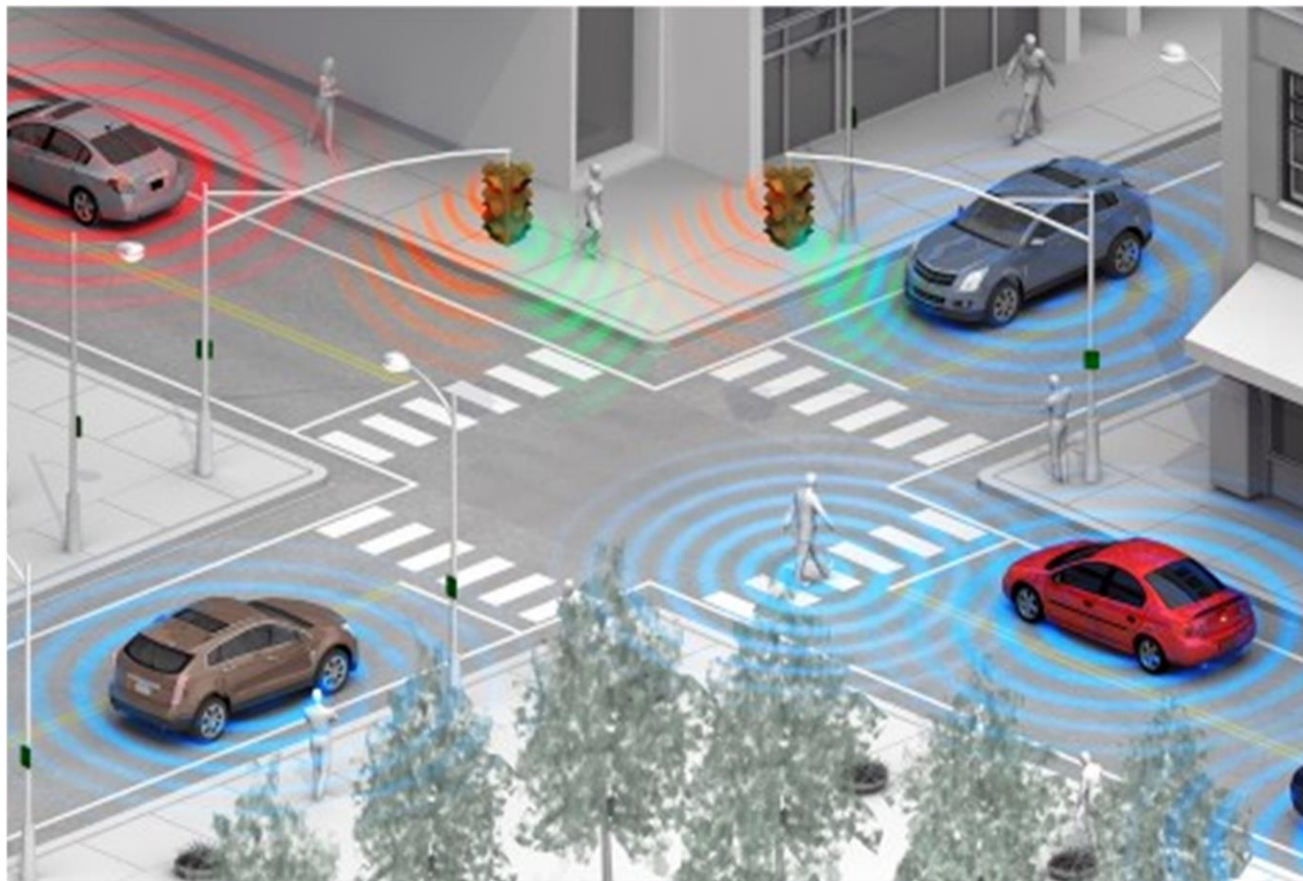But sometimes the potential outcomes could be quite different….

Westminster Terror Attack

- – – Approx route of vehicle
- — Approx route of attacker on foot
- ● Location of injured and/or dead

BBC

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Software Size (Million Lines of Code)

The direction of travel……….

- Connected and automated vehicles are on the agenda of many Governments.

- Intelligent mobility has numerous opportunities for consumers, infrastructure providers, etc.

- It's what society is demanding.

Connectivity is a good thing but…..

The security threat increases with.....

- the increasing number of internet connected cars.

- greater use of wireless comms.

- more networks within vehicles.

- more connection with Nomadic Devices.

- better tools for code-breaking.

- faster communication/sharing of hacking methods through social media/internet sharing.
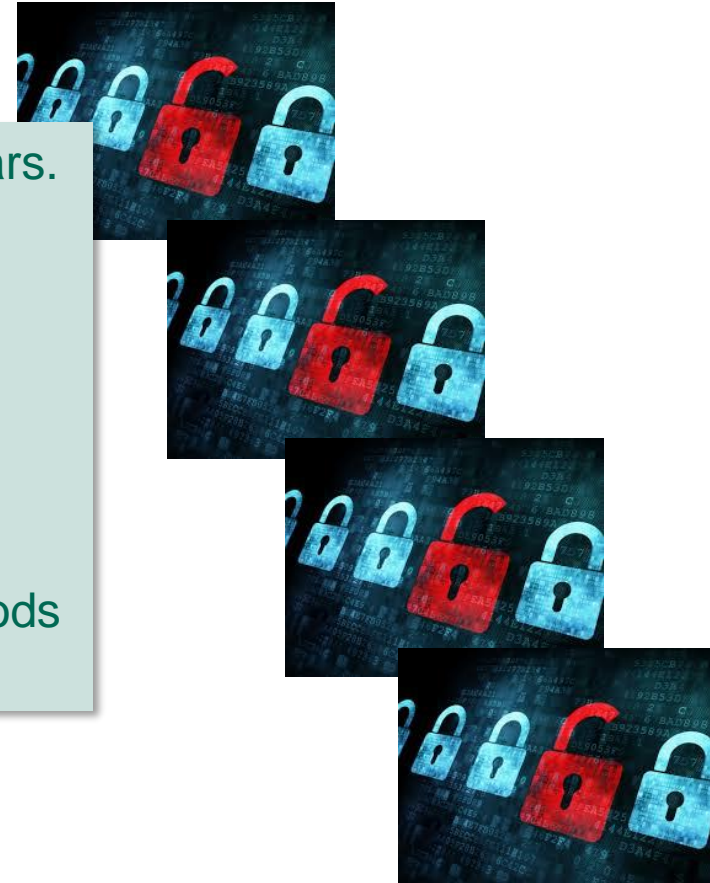
What does enforcing software security mean for registration authorities?

- Should we/how do we communicate the software ID number (for new vehicles) to registration authorities?

- Should the vehicle record be updated routinely when a software update is implemented?

- How do we communicate to enforcement authorities

- Does it link into PTI/roadw

- How would an authority en software version installed/

- How would it link into a na

- Implementation timescales – uncertain currently

- Best guess is new vehicles from 2022/3

- Could require national implementation as will cover issues beyond a new vehicle specification.

- But other factors might dictate the pace.

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Thanks for your time.

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