



Belgisch **Wegen**congres Congrès belge de la **Route**

LEUVEN · 4-7.04.2022

Weginfrastructuur: Digitaal en geconnecteerd

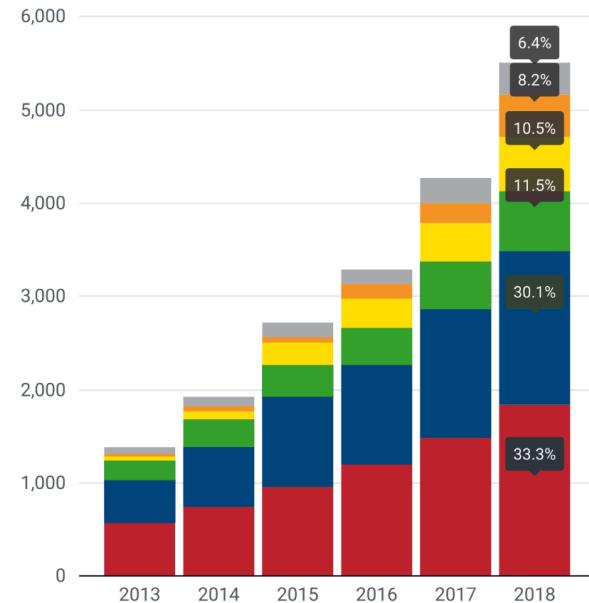




■ Europe ■ US ■ Japan ■ South Korea ■ China ■ Rest

Today: Digitalisation

- **How this new digital world will impact people and work:** Connectivity and automation are reshaping mobility
- **Digitalisation also keeps EU industry globally competitive:** Europe still leads
 - Accounting for 33.3% of all patents related to self-driving vehicles
 - China, US, Japan, Korea, catching up fast
- **Requires huge investments**
 - OEMs continued to make investments even during health crisis





Enabling legal framework

- Revision of the ITS Directive
- RTTI Delegated Regulation
- Federation of the NAPs project (NAPCOR)
- Data Act & Mobility Data Space(s)
- Data Governance Act (G2B section)
- UN-ECE R 157 (ALKS) & delegated Regulation on Automated Driving Systems
- Urban Mobility Package
- Data For Road Safety Ecosystem (Data Task Force)



Example 1: C-ITS Services

Road Safety Related

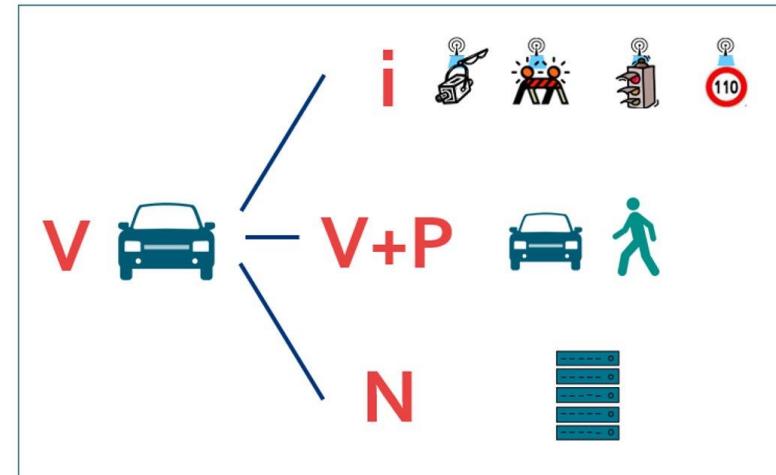
- Emergency vehicle approaching
- Slow or stationary vehicle(s)
- Traffic jam ahead warning
- Hazardous location notification

Cooperative traffic efficiency

- Traffic information and smart routing
- Traffic Light Assist
- Green Light Optimal Speed Advisory (GLOSA) / Time to Green (TTG)
- Road works warning
- Weather conditions

Cooperative local services

- Off street parking information
- Park & Ride information
- Information on AFV fuelling & charging stations
- Zone access control for urban access





Example 2: Data for road Safety

- EC delegated Regulation of 15 May 2013 on sharing of safety related traffic information
- Principle: information on 8 events free of charge to end-users (drivers)
 - Unprotected accident area
 - Animal, people, obstacles, debris on the road
 - Temporary slippery road
 - Reduced visibility
 - Exceptional weather conditions
 - Short-term road works
 - Wrong-way driver
 - Unmanaged blockage of a road
- Cooperative approach through Extended Vehicle with data intermediary
- Ecosystem with OEMs, service providers, road authorities & EC

www.dataforroadsafety.eu





Automated Driving



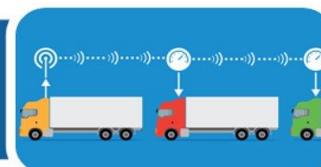
- Automated valet parking
- Robot taxi
- Highway chauffeur



- Automated last mile distribution
- Automated urban logistics



- Truck platooning
- Automated public transport & shuttles
- Hub-to-hub automated transport





Reflections going forward

- Backward compatibility of technologies: E.g. impact switch-off 2G/3G on eCall
- Review product liability regime & AI
- The “human factor”: demystification of automated driving, upgrade skills
- Upgrade physical/digital infrastructure & digital twins, role of road authorities & cities
- Automated driving:
 - EU type approval framework must be adapted
 - Need for a minimum set of ethical rules ?
 - Harmonisation/synchronisation of national traffic rules/regulations across Member States
 - Legal stability, common interpretation of Vienna and Geneva conventions
- Affordability & inclusion
- Automotive value chain is not European but global (dependency on third countries).
Example of semiconductor shortage/dependency on economies outside EU



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Opzoekingscentrum
voor de Wegenbouw



BRUSSEL MOBILITEIT
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BFAW
Belgische Federatie van Aannemers van Wegenwerken vzw



Contact

 Naam

 Tel

 e-mail

