

The CARS OF THE FUTURE: Challenges for CONSUMER POLICY

HOW CARS WILL CHANGE

Major technological changes are happening in the automotive sector. These include advances in the use of communication tools, increased automation and changes to the way cars are powered. Consumers can benefit from this innovation, for example by walking in safer streets, finding themselves in fewer traffic jams or saving money on fuel. But such changes also raise questions regarding liability, safety, data protection, fair competition and more.



As the use of finite, polluting fossil fuels gets questioned, **NEW WAYS OF POWERING OUR CARS**, especially electricity, are gaining momentum.



CONNECTED CARS have devices that can communicate with other devices, both inside and outside the car. This includes other vehicles, the infrastructure and the internet. A connected car is not necessarily automated.



AUTOMATED CARS allow some or all driving functions to be controlled without supervision. Automated cars are by default connected cars.

What DOES THIS MEAN for...



PRODUCT LIABILITY?

Who is liable in case of an accident with a (partially) automated car?
The driver? Manufacturer?
Software provider?



TYPE APPROVAL?

In the future, software updates will increasingly be able to change primary features of vehicles (remote operation, for example). How do we make sure these updated features continue to conform – regarding emissions or safety, for example – with a car's pre-market (type) approval certificate?



CYBERSECURITY?

Are connected and automated cars sufficiently protected against hacking?



MOTOR INSURANCE?

Who should be insured against accidents/faults when a car is automated? The 'driver', the manufacturer or the software provider? And what information – that is, data produced by the car – can insurance providers legitimately access when setting premiums and covering incidents?



ENERGY MARKETS?

What effect does car charging have on the electricity grid?



CHARGING POINTS AND INTEROPERABILITY?

How do we avoid issues with payment methods and apps when drivers charge their electric car?



QUALITY OF CONNECTION?

Are telecom markets and laws ready to provide the required connectivity for the cars of the future? Will small telecom companies be able to participate in this new market?



FAIR COMPETITION?

Could manufacturers of connected cars have a competitive advantage – in terms of access to vehicle data – over independent repair and maintenance centres, or providers of innovative services? This could lead to higher service costs and less innovation due to data barriers. How to prevent economic operators from being squeezed out of the market?



DATA PROTECTION?

How are the personal and non-personal data that a car produces protected?

Policy RECOMMENDATIONS

TO PREPARE CONSUMER LEGISLATION AND POLICY FOR THE CARS OF THE FUTURE, WE RECOMMEND:

To take the following CAR-SPECIFIC ACTIONS:

- Review the Motor Insurance Directive to make it fit-for-purpose in terms of connected and automated cars.
- Develop common security standards and data protection (GDPR) guidelines for connected and automated cars.
- Monitor the implementation of the Alternative Fuels Infrastructure Directive so that public charging stations are open and non-discriminatory for consumers.
- Run an EU-wide assessment of the cost impacts, standardisation requirements and health/safety risks of increased levels of connectivity and automation.

To review several LAWS ON CONNECTED PRODUCTS (which includes cars):

- Ensure that the Product Liability Directive fully covers technological developments for all connected and automated products.
- Forge the EU's rules on e-privacy in a way that protects consumers' privacy in their connected cars.
- Make certain that car makers and service providers can and will guarantee fair access to the storage and sharing of vehicle data. This should be in full compliance with data protection laws and the principles of privacy by design and by default.
- Put technical measures in place so the consumer can take their data with them (data portability) and decide who should access the data generated by a car.

To be prepared for CONTEXTUAL ISSUES directly related to car innovations:

- Keep the global car type approval and market surveillance process on par with technological change. Authorities ought to test if the security system of vehicles can be hacked, and check a car's software updates for continued compliance with type approval.
- Allow a competitive telecoms market to exist where easy switching between providers is possible. This should push providers to provide a high-quality network connection, through which connected features can actually connect.
- Make it possible for electric car owners to access electricity offers with dynamic pricing. This will be important as more electric cars hit the road and create more demand for electricity. Batteries of electric cars, when not in use, can also be a storage facility for renewable energy, helping production match demand.

Related BEUC documentation:

➤ [Protecting European consumers with connected and automated cars](#)

➤ [Cybersecurity for connected products](#)

➤ [Securing consumer trust in the Internet of Things](#)

➤ [Electric cars: game changers for tomorrow's energy offers](#)



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The Consumer Voice in Europe

