

Notes From the Panel Discussion “Legal and Regulatory Challenges for Autonomous Driving”

A Joint Squire Patton Boggs Event
With the University of Vienna

24 September 2018





Panel (from left to right): Nikolaus Forgó (Professor at University of Vienna, Moderator), Joanna Szychowska (European Commission), Monika Kuschewsky (Squire Patton Boggs), Marleen Roubik (Austrian Ministry for Transport, Innovation and Technology – BMVIT), Julian Pehm (Data Protection expert, Austrian Academy of Science), Christian Jaksch (Volkswagen and PhD student).

Key Messages

- A massive paradigm change is underway, the entire automotive ecosystem will be disrupted, the car industry needs to reinvent itself.
- The future scenario will be focussed on automated mobility; this comes with a huge paradigm change; people increasingly want to use a car (need mobility), not necessarily want to own a car.
- Connectivity between cars and between cars and (road) infrastructure is key in this ecosystem.
- First priority for all stakeholders is safety to reduce the number of accidents and ecologisation of the road transportation, followed by data protection, cybersecurity and liability issues.
- Connectivity between cars and between cars and (road) infrastructure is key in this ecosystem.
- Public money is needed for funding research, large-scale testing and digital infrastructure.
- Liability is a great issue; countries with a legal system based on fault-based liability are facing a need for massive changes in their legal framework.
- GDPR creates a series of additional issues in the AD context.



Link to pictures taken by M. Holzweber (University of Vienna)



After an introductory message from Prof. Forgó (introducing the panellists and Squire Patton Boggs), **Joanna Szychowska** presented the EC views on the challenges ahead.



Joanna Szychowska

Head of Unit, Automotive and Mobility Industries, DG GROW, European Commission was appointed Head of Unit C4, Automotive and Mobility Industries, at DG for Internal Market, Industry, Entrepreneurship and SMEs in the European Commission, in June 2015. Her responsibilities focus on strengthening the competitiveness of the European automotive industry.

A massive paradigm change is underway:

- We are currently on a path from *automated driving* to *autonomous driving* (AD)
- In the automated driving context, “the car” (automobile) as we know it, is still in the focus
- The closer we are getting towards autonomous driving, things are changing fundamentally
- An autonomous car will look completely different (we know concept studies), it will bring a massive change, a disruption of the predominant perception, no driving license will be needed anymore to use such a vehicle, autonomous driving will be a path towards clean(er) transportation
- The entire automotive ecosystem will be disrupted, car industry needs to reinvent itself
- Will we need more or less of such vehicles? The EC is intensively contemplating all these relevant issues
- The future scenario will be focussed on automated mobility; this comes with a huge paradigm change; people increasingly want to use a car (need mobility), not necessarily want to own a car
- Connectivity between cars and between cars and (road) infrastructure is key in this ecosystem

First priority is safety:

- Reduce fatalities, however, there will still be fatalities
- A side effect will be cleaner traffic (i.e. less emissions and environmental impact)
- **Impact assessment** – In May 2018, the EC published a communication inter alia about ethical issues and societal impact of autonomous driving; a massive impact on traditional jobs can be expected (taxi drivers will no longer be needed)
- EC has taken a technology neutral approach (because the innovation pipe cannot be foreseen) and a step-by-step approach
- There are five steps to fully autonomous traffic; currently we are operating at step two and we are testing steps three and four; step five currently does not exist



Infrastructure:

- Public money is needed for funding research, large-scale testing and digital infrastructure
- Member states are investing in test facilities, both national and cross-border, to collect experience and exploring the interplay between infrastructure and connectivity
- In the area of autonomous technologies, the EU still has a competitive edge in comparison to Asia and the US. This area has to be strengthened!

Legal framework:

Safety/technology:

- In EU, an approval is needed prior to commencing operation
- There are concerns that a technology gap may occur
- Lane change mechanism is critical
- Beginning of 2019 a new framework will be published, probably requiring a “black-box” in every vehicle

Cybersecurity:

- Guidelines and design principles

Data protection and data sharing:

- Complex situation between vested economic interests, data protection requirements and security considerations
- Access to data?
- Who can use the data?
- Data sharing? Using a server on which all data are stored? creates a natural conflict with OEMs

Liability:

- In an autonomous driving context, the liability shifts from the driver to the manufacturer of the vehicle; an EC working group looks into new forms of product liability
- Ethical and societal acceptance – Societal acceptance will be needed to make AD an economic success. There will be a massive impact on society from AD, estimates are hovering between 47% and 90% of existing jobs will be affected upskilling the workforce is imperative
- Mixed traffic (conventional cars and autonomous vehicles) will be a challenge
- Most critical: people can hardly accept that a machine decides in a critical situation



Marleen Roubik (BMVIT)

Marleen Roubik serves as a legal expert at the department of Mobility Change & Decarbonization at the Federal Ministry of Transport, Innovation and Technology (BMVIT) in Austria.

Her fields of expertise are automated driving and electromobility.

Why is the BMVIT pursuing its activities?

- Safety is the biggest concern: 70% of all car accidents are caused by human errors, like distraction of the driver
- Huge potential for ecologic improvement
- Strong societal effect, in particular for disabled people

What is the BMVIT doing?

- Supporting the creation of testing infrastructure and testing environments
- Austria has 800 companies and start-ups, active in the AD field

Legal Requirements for AD

Implementation Ordinance

For test runs, a permit is required, three functions/application scenarios can be tested:

- Autonomous military vehicles
- Mini busses ≤ 20 km/h
- Cars

Who can apply for a test permit?

- Car manufacturer
- Research facilities
- System supplier

Other conditions:

- During a test campaign, a test driver/observer must be permanently on board, able to immediately take over control at any time by disabling the autonomous mode
- A test recorder (black box) must be active throughout the entire test campaign
- Before a test campaign starts on a public road, a minimum number of test km must be made on a private facility

The BMVIT has published an action plan for automated mobility; the question is not if automated cars will come at all, only when and how.

The BMVIT considers AD as part of an overall ecosystem comprising automation, electrification and “ecologisation”.

The test range near the city of Graz is operated by ASFINAG, the Austrian highway operator. They take care, that 5G mobile network will be available as soon as possible on the testbed, spanning a total length of 1.4 km.

The BMVIT would be open to applications going beyond the above mentioned scenarios and application limitations. If necessary, the underlying legal ordinance could be changed.





Julian Pehm (Tort Law Expert)

Research Assistant at the Institute for European Tort Law (Austrian Academy of Sciences and University of Graz)

In the debate with the audience, the issue of the “**e-person**” has been mentioned. In other words, will an AC become a legal person, taking over responsibility and liability?

Pehm responded, that he will not address the e-person issue.

Julian Pehm started explaining his view on the different liability regimes in Europe. To provide a sense of the magnitude of the problem, Pehm mentioned that, in Germany, every year more than 3,000 fatalities happen as a consequence of 2.5 million car accidents.¹ This is one of the reasons that, in most countries, compulsory liability insurance exists.

In tort law, different concepts of human responsibility are in place:

- Fault-based liability is a concept based on human error, misconduct or violation of rules
- Strict liability (in German “*Gefährdungshaftung*”) focusses more on the product and not on the behaviour²

In some EU countries, strict liability only applies in case of injuries.

In an AD context, these two liability regimes have different consequences:

- In a strict liability regime, no change of the legal framework is required for AD
- Countries, relying on fault-based Liability need to change the legal framework massively because, in this case, the liability shifts from the driver to the operating system

What are possible ways out?

- Adopting stricter standards of care alone will not help.
- Optimise the fault-based liability concept and optimise the human-machine interface. This may help to improve the fault-based liability system in an AD context.
- Product liability currently plays only a minor role in an AD context, though product liability will become much more important. However, victims of accidents (in particular pedestrians) will face big problems to prove product liability.
- In the UK, a new option has been developed, extending the coverage of liability insurance

¹ According to official statistics, the actual number of fatalities from car accidents in Germany is 3.200.
www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2018/02/PD18_063_46241.html
In the presentation the number 3mio has been mentioned; this is probably the number of personal injuries.

² **Excursus:** Strict liability does not require intent, negligence or anything else. If you commit the action, you are responsible. An example of this in the civil arena would be product liability. Under a theory of strict liability, the law focuses on the product rather than the actions of the business who created or sold the product. So, the business need not be negligent in the creation of the product, rather, the result of that product is what matters. In case of **fault-based liability**, it matters if you had the intent to do the act. The difference between fault-based liability and strict liability is intent. In fault-based liability, intention matters or rather is the deciding factor, but in case of strict liability, intention does not matter.





Christian Jaksch (Data Protection)

Christian Jaksch works at Volkswagen AG as a Data Protection Expert and is a PhD Student at the University of Vienna.

In his contribution, Jaksch focussed on the applicability of GDPR-based principles for AD and the challenges AD provides for all stakeholders involved.

Agenda

- **Overview** – Data protection principles as challenge for autonomous driving
- **Challenge** – Principle of “lawfulness” in this context

Challenges data protection principles

GDPR data protection principles:

- | | | |
|-----------------------------|----------------------|---------------------------------|
| • Legitimate purpose | • Purpose limitation | • Storage limitation |
| • Lawfulness | • Data minimisation | • Integrity and confidentiality |
| • Fairness and transparency | • Accuracy | • Accountability |

Challenge principle “lawfulness”

The GDPR gives in this context four possible legal basis to process personal data lawfully:

- Informed consent (Art 6 Par 1 lit a GDPR)
- Contract fulfilment (Art 6 Par 1 lit b GDPR)
- Special law (Art 6 Par 1 lit c, lit e; Art 6 Par 2 – 3 GDPR) – Germany § 63a StVG
- Legitimate interest (Art 6 Par 1 lit f GDPR)

Nevertheless GDPR no valid legal base?

- Art 29 Working Party (WP 252) says that the best legal basis for C-ITS (Cooperative Intelligent Transport Systems), would be the enactment of an EU wide legal instrument – so called Delegated Act. GDPR is not valid enough...
- This Delegated act should define the purposes for the use of C-ITS data, would introduce limitations to reuse and retention of data, and would require the provision of clear information to users about the processing of their data, etc.

ePrivacy Regulation

- Additional to GDPR and additional to the Delegated Act for C-ITS data.
- ePrivacy-Reg (Art 5 – Art 7) for “M2M communication” and new rules for „terminal equipment” (Art 8) and “Software placed on the market” (Art 10).

Jaksch concluded by stating that “black-boxes” (like in an aircraft) will become mandatory for ACs.





Monika Kuschewsky (Data Protection Lawyer)

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Monika focussed in her statement on the practitioner's view.

A myriad of legal, regulatory and public policy issues:

- Data rights and "ownership"
- Security by design
- Algorithms
- Cybersecurity
- Contractual hygiene
- Interoperability
- Standards
- Access to data
- Liability
- Antitrust
- Safety
- Product liability
- Insurance
- Privacy

Market leading autonomous driving focus

Experts in the field

- Including former US Secretary of Transportation and former Chief Information Officer under the Clinton and Obama Administrations

Thought leaders

- Leading discussions around the world, from San Francisco to Sydney, bringing together companies that are changing the industry

Diverse capabilities

- Spanning multiple practice areas to address legal, regulatory and public policy implications resulting from the autonomous vehicle technology evolution

Preeminent public policy practice

- Global experience in the automotive industry and in-depth knowledge of safety and compliance issues centred in Brussels, London and Washington DC

Dedicated automotive and transportation teams

- Advising new entrants to the market, such as Intel, Uber and Cisco, and established players like Audi, VW, Continental and Visteon, to navigate the changing regulatory landscape

Internationally renowned product liability team

- Extensive experience in evaluating risks on a global basis and advising product defects posed by autonomous vehicles

Data protection legal framework

Interplay of complex set of rules and legal frameworks with overlapping and contradictory demands:

- GDPR
- Proposed e-Privacy Regulation (still pending)
- Cybersecurity laws
- Sector-specific rules (transportation regulations, C-ITS, type approval legislation)

GDPR has increased obligations – need to monitor impact of other pieces of legislation and initiatives:

- Various initiatives at EU and EU member state level
- Initiatives in third countries (e.g., U.S.) and at intra-state and global level

Key issues from a data protection law perspective:

- Nature of the data (personal data vs. other data)
- Ownership vs. responsibility (joint controller/controller/processor)
- Notice (transparency)
- Consent and other legal bases of processing
- Contract management
- Profiling
- Data sharing
- Data protection by design
- Data security
- International transfers

