

Quelle: Paul Taylor / Getty Images

Legal framework for autonomous driving in Germany

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Article 8: Drivers

1. Every moving vehicle or combination of vehicles shall have a driver....
5. Every driver shall at all times be able to control his vehicle...

Recent change:

UN Economic and Social Council, Geneva 2014, Amendment of Article 8 Convention on Road Traffic:

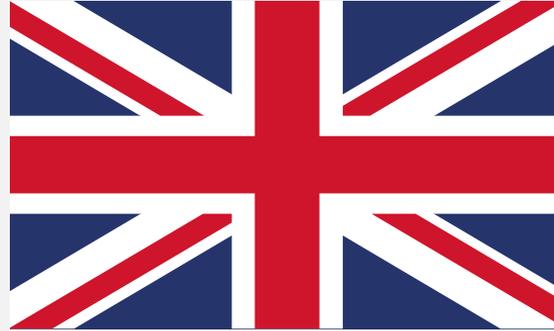
... Vehicle systems which influence the way vehicles are driven and are not in conformity with the aforementioned conditions ... shall be deemed to be in conformity ... when such systems can be overridden or switched off by the driver...

National law so far



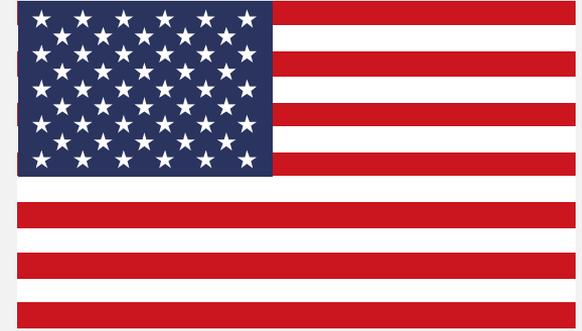
Germany:

Fit for purpose:
Strict liability of keeper of car.
Insurance focus on car, not driver.
High minimum coverage.



UK:

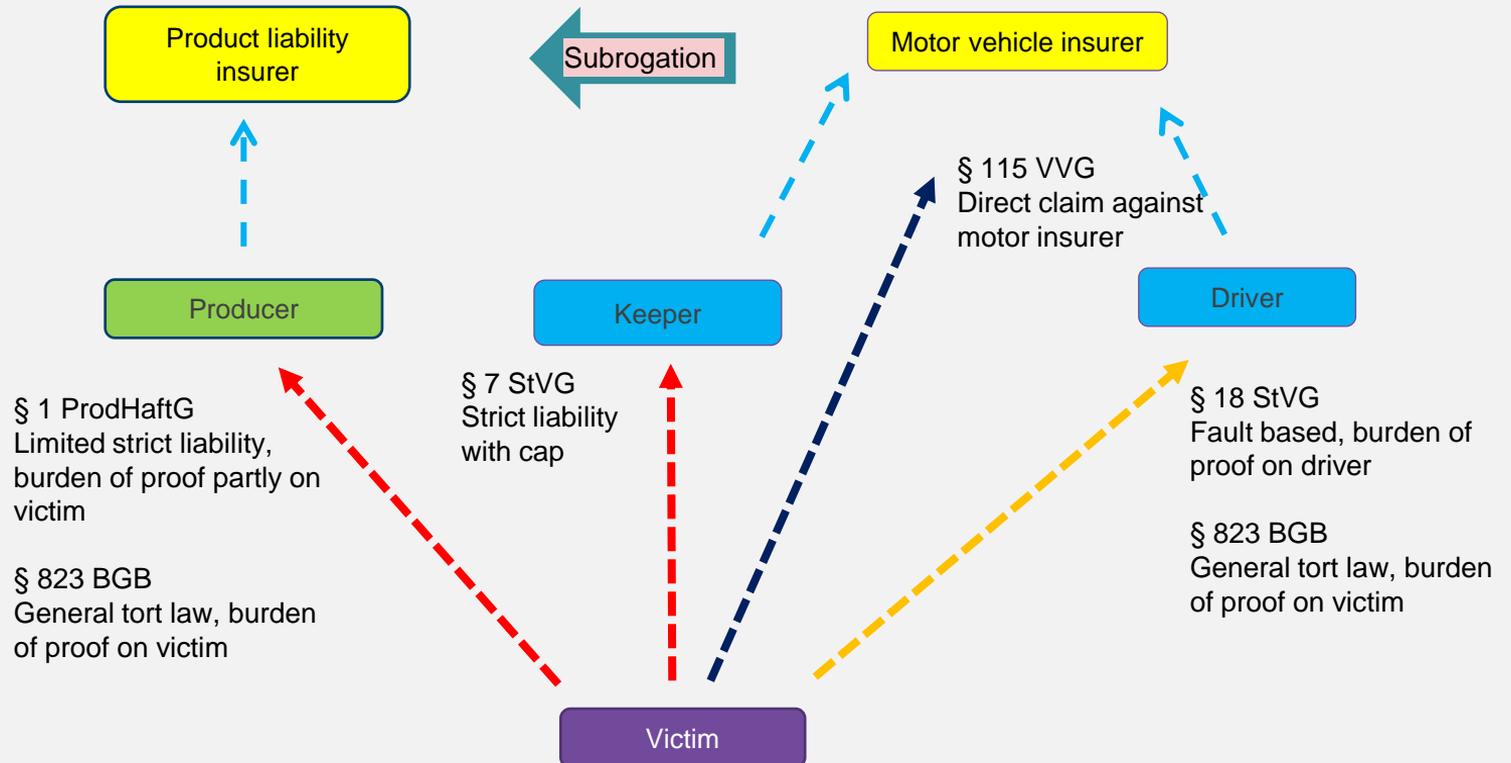
Currently made fit for purpose:
Vehicle Technology and
Aviation Bill/Automated and Electric
Vehicles Bill 2017:
Motor insurer compensates all victims
and can then try recourse against
car manufacturer.



US:

It's complicated. Generally: Focus
on driver, mostly fault-based liability,
low minimum coverage.
Liability/insurance regulated by
State law, few yet have specific laws
for liability for autonomous vehicles.

Germany: Potential claims of victim after motor accident



1. The driver **has to be able to overrule** or deactivate automatic functions at any time (sec. 1a para 2 No. 3 Road Traffic Act).
2. While driving in a highly automated modus, the driver is allowed to turn away from the traffic but **has to stay sufficiently alert** to be able to take control without undue delay if asked to do so by the automated system or if he recognizes or due to obvious circumstances has to recognize that the automated system is not working as planned (sec. 1b Road Traffic Act).
3. **Liability caps** for liability under the Road Traffic Act (strict liability of keeper, fault-based liability of driver with reversed burden of proof) were **raised** for vehicles driving in automated modus from 5m to 10m € for personal injury and from 1m to 2m € for property damage (sec. 12 Road Traffic Act).
4. Cars with automated driving systems must be equipped with a **black box**. **Access to** accident relevant **data** has to be provided by the keeper to any third-party depending on this data for compensation claims in this context (sec. 63a Road Traffic Act).

“20 ethical rules for automated and connected driving”

Key findings:

- 1.** Protecting human life and **minimizing losses has to be the top priority** of any regulation regarding road traffic and automated driving.
- 2.** Introducing automated **driving** is acceptable if this leads to an **overall reduction of risks and losses**, including cyber risks. Regulation has to respect the freedom of the individual (use of automated systems not compulsory, data ownership).
- 3.** In **dilemma situations** (life against life), accident avoidance and protecting human life has priority. Weighing one life against the other based on personal characteristics is strictly prohibited. In emergency situations highly automated vehicles must be able to reach a “safe condition” autonomously.
- 4.** It must always be **recognizable** and documented who is in control, the automated system or the driver.

Liability issues to be resolved



Autonomous driving and safety:
Today: Most accidents are caused by
human error
So: No human driver, no accidents?



Or just new Risks?
Malware, Hacking, Data breach,
maintenance problems

Liability issues to be resolved



Who is liable:

Keeper of car? User?

Manufacturer? Softwareprovider?

Responsibilities for updates?

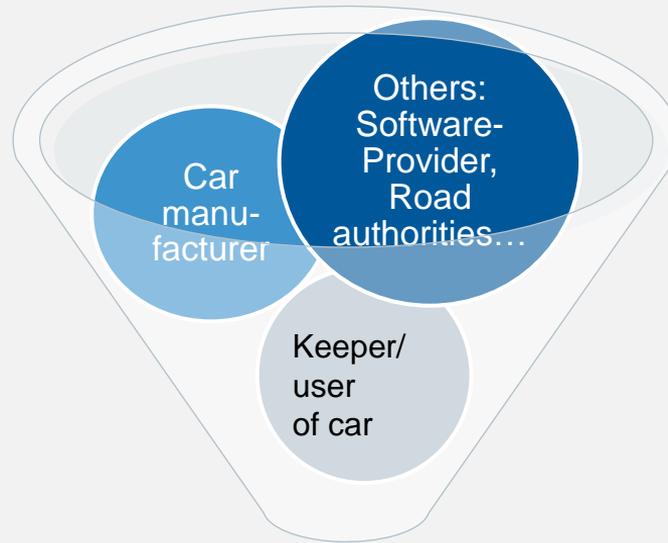


Algorithms of death/Dilemma situation:

Lesser of two evils?

- Killing one/several people?
- Who decides?

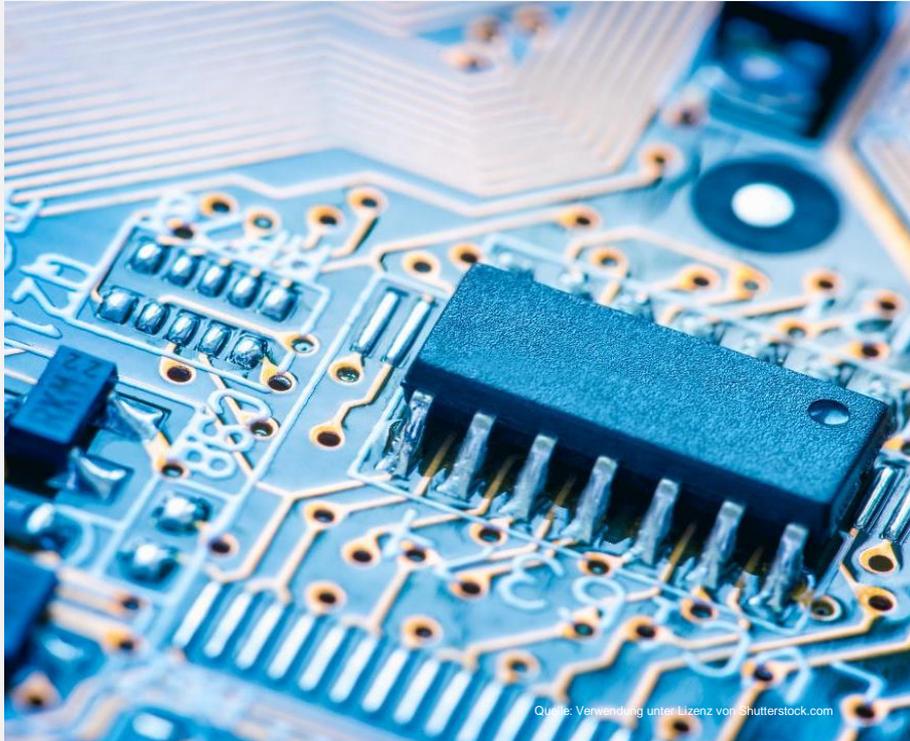
Coverage issues



Who needs coverage?

**Less need for coverage overall?
Or just different players?**

Autonomous driving and Big Data



- ▶ Calculating risk-adequate premiums
- ▶ Loss mitigation, avoiding fraud
- ▶ Higher/lower transaction costs?
- ▶ Who has right to collect/use/have access to data?
- ▶ Cyber-Liability Risks, hacking, data abuse



- **Technology:**
 - Human-Robot interaction
 - Dealing with complicated scenarios, all weather conditions and mix of autonomous and non-autonomous vehicles
 - Cyber security
 - Adjust infrastructure
- **Mentality:**

Do we really want/trust autonomous vehicles?
Or do people just want a little „robot help“ in certain scenarios (parking, stop-and-go etc)?



■ Regulation:

No fundamental changes necessary. Minor adjustments?

- Simplify subrogation
- Clarify data access/data protection requirements
- Secure sufficient coverage for all actors
- Extend coverage of motor insurance to anyone inside an autonomous car?
- Raise cap for strict liability (e.g. from 10m to 50m €?)

■ Insurance:

- Adjust motor/product/cyber liability products
- Make best use of Big Data
- Understand accumulation risks