Liability and new technologies: Concepts and addressees of liability

January 21st, 2020, Brussels
Prof. Dr. Georg Borges

- Professor, Chair of Civil Law, Legal Informatics, German and International Business Law, Legal Theory, Saarland University
- Director, Institute of Legal Informatics, Saarland University
- Judge, Oberlandesgericht Hamm (2012-2015)
- Chairman of the Board, Working Group Identity Protection on the Internet (Arbeitsgruppe Identitätsschutz im Internet, a-i3)
- Member of the Board, EDV-Gerichtstag e.V.
- Member of the Board, Stiftung Datenschutz
- Fellow, Center for IT-Security, Privacy and Accountability (CISPA)
- Member, EU Commission Expert Group „Liability for New Technologies“
Institut für Rechtsinformatik – Fields of Research

- AI / Autonomous Systems
- Legal Informatics / Legal Tech
- Data Protection
- IT-Security
- Industry 4.0 / Cloud Computing
- Big Data eGovernment / eJustice
Educational programmes and outreach

- **Education**
  - Postgraduate degree „IT and Law“ (LL.M.)
  - Focus Area „IT Law and Legal Informatics“
  - Summer School „IT Law and Legal Informatics“
  - Certificate „IT Law and Legal Informatics“

- **Events**
  - Symposia/Workshops/Seminars
  - i.e. GDPR Data protection in practice

- **Services for the public**
  - GesetzMobil
  - JuraPush, BGH-Push
  - IT-Recht.Karriere
Masters programme (LL.M.) „Informationstechnologie und Recht“

- Interdisciplinary teaching
- 12 modules
- Part time studies possible
- Professors as mentors
- Study period: 1 year (~ 2 terms)
Summer School
IT Law and Legal Informatics

More Information:
www.summerschool-itlaw.org

Summer School 2020
IT Law and Legal Informatics
10th to 21st August 2020 – Saarbrücken (Germany)

Following the success of our Summer Schools in 2017, 2018 and 2019, we will again be running an International Summer School at the Saarland University in Saarbrücken. It is aimed at students, researchers and practitioners who are keen to discuss current topics of IT Law and Legal Informatics in an international forum.
Career Portal IT-Law: www.it-recht-karriere.de

- **Information** about educational possibilities and further training in IT-Law

- **Job board**: jobs.it-recht-karriere.de
  - Job offers / Legal Trainee positions / internships
  - Students/ Ph.D students / entry level positions
Agenda

I. Introduction: Specific risks of emerging technologies
II. Compensation of victims
III. The responsibility of the producer
IV. Conclusion and theses
Introduction: Specific risks of emerging technologies
Responsibility for autonomous systems

“... killed by an Uber self-driving SUV”
Compensation of victims
**Protection of victims**

- Principle: Risks arising out of the use of new technologies should not be borne by the victim

- Conclusion: Compensation for damages should be guaranteed
### Models of compensation

#### Compensation funds
- Compensation funds replacing liability
- Compensation funds filling gaps when liable party cannot compensate

#### Liability
- Fault-based liability
- Strict liability in a broad sense (e.g. product liability; requirement of a violation of a norm, e.g. defect)
- Objective liability (for any damage caused within a defined sphere of risk, e.g. operation of a car)

**Conclusion:** Need for objective liability to guarantee compensation in some cases
Parties and roles

Producer

Operator
(e.g. registered keeper of a car)

Seller

User
(e.g. driver of a car)
Liability of the operator

- **Thesis:**
  
  “The operator should be liable to compensate the victim.”

- **Rationale:**
  - The operator benefits from the use of the technology
  - The operator is very often best in place to control the risks of the technology
  - The operator (rather than the producer) can be addressed by the victim

- **Expert Group key finding:**
  
  [10] Strict liability should lie with the person who is in control of the risk connected with the operation of emerging digital technologies and who benefits from their operation (operator).
The responsibility of the producer
The responsibility of the producer

Liability for Autonomous Cars
Liability for car accidents: Roles and Participants

- Driver
- Registered Keeper
- Insurer
- Manufacturer
Liability of the Registered Keeper

Section 7 Paragraph 1 German Road Traffic Law
Liability of the registered keeper, clandestine operation of a vehicle

If, during the operation of a motor vehicle or a trailer to be carried along by a motor vehicle, a person is killed, the body or health of a person injured, or property is damaged, the holder of the vehicle is obligated to compensate the injured person for the damages arising therefrom.
Section 18 paragraph 1 Road Traffic Act (Straßenverkehrsgesetz; StVG)
Obligation of the driver to pay compensation

In the cases where section 7 paragraph 1 applies, the driver of the vehicle or trailer is also obliged to pay compensation pursuant to the provisions of sections 8 to 15. The obligation to pay compensation is excluded if the damage is not caused by the fault of the driver.
Compulsory Insurance

- **Section 1 Compulsory Insurance Act (Pflichtversicherungsgesetz; PflVG)**
  - The duty of the registered keeper to maintain compulsory insurance

- **Section 115 I 1 No. 1 Insurance Contracts Act (Versicherungsvertragsgesetz; VVG)**
  - The injured party can claim against the insurer directly

- **Section 116 I 1 Insurance Contracts Act (Versicherungsvertragsgesetz; VVG)**
  - Sole liability of the insurer in the internal relationship
Interim Conclusion

- Regulation of accidents involving vehicles occurs via a system of compulsory insurance
- Focus of liability is on the vehicle’s registered keeper
Product Liability Law

Section 1 paragraph 1 1\textsuperscript{st} sentence
(Product Liability Act; Produkthaftungsgesetz, ProdHaftG)

Liability

In such case as a defective product causes a person's death, injury to his body or damage to his health, or damage to an item of property, the producer of the product has an obligation to compensate the injured person for the resulting damage.

- Defect (of the product) and causal link are required to establish liability
- Liability is similar to Section 823 I BGB (German Civil Code)
Manufacturer as the Driver of the Vehicle?

Section 18 paragraph 1 StVG
Obligation of the driver to pay compensation

In the cases where section 7 paragraph 1 applies, the driver of the vehicle or trailer is also obliged to pay compensation pursuant to the provisions of sections 8 to 15. The obligation to pay compensation is excluded if the damage is not caused by the fault of the driver.
Liability for Autonomous Cars

- **Bitkom-Survey** on liability for autonomous vehicles
  - The question posed was, who should be liable in the case of accidents caused by self-driving cars?
  - 1,006 people over the age of 14 years were asked

![Pie chart showing responses]

- Software-provider (38 %)
- Vehicle manufacturer (35 %)
- Operator (19 %)
- Registered keeper (0 %)
- No answer (8 %)
Liability for Autonomous Cars

- **Bitkom-Survey** on liability for autonomous vehicles
  - The questions posed was, who should be liable in the case of accidents caused by self-driving cars?
  - Survey of:  
    177 Business involved in the automobile industry
Fundamental Principles of Objective Liability for Vehicles

Section 7 paragraph 1 Road Traffic Act (StVG)
Liability of the registered keeper, joyriding

If during, the use of a motor vehicle or a trailer which is intended to be towed by a motor vehicle, a person's death, injury to a person’s body or damage to his health, or damage to an item of property is caused, the registered keeper has an obligation to compensate the injured person for the resulting damage.

- Goals of Section 7 StVG
- Allocation of risk according to controllability
- Protection of the injured party
- Effectiveness of compulsory insurance
Objective Liability of the Manufacturer de lege ferenda

- **Proposal:**
  Introduction of objective liability of the manufacturers of self-driving cars

- **Requirements**
  – Manufacturer
  – Accident must have occurred whilst the vehicle was driving autonomously
Objective Liability of the Manufacturer de lege ferenda

- **Proposal:**
  Introduction of objective liability of the manufacturers of self-driving cars

- **Relationship to liability of registered keeper**
  - Liability of registered keeper will remain
  - Joint and several liability of the external relationship
  - Internal settlement between the registered keeper and the manufacturer
Conclusion

- Liability for self-driving cars cannot be solved satisfactorily by de lege lata

**Solution:**
Introduction of objective liability of the vehicle manufacturer

- Coordination with liability of the registered keeper
The responsibility of the producer

Liability for Autonomous Systems in general
Liability for Autonomous Systems in general
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Liability for Autonomous Systems in general

Section 833 German Civil Code
Liability of animal keeper

If a human being is killed by an animal or if the body or the health of a human being is injured by an animal or a thing is damaged by an animal, then the person who keeps the animal is liable to compensate the injured person for the damage arising from this. Liability in damages does not apply if the damage is caused by a domestic animal intended to serve the occupation, economic activity or subsistence of the keeper of the animal and either the keeper of the animal in supervising the animal has exercised reasonable care or the damage would also have occurred even if this care had been exercised.
Classification and Registration
Calls on the Commission, when carrying out an impact assessment of its future legislative instrument, to explore, analyse and consider the implications of all possible legal solutions, such as:

e) ensuring that the link between a robot and its fund would be made visible by an individual registration number appearing in a specific Union register, which would allow anyone interacting with the robot to be informed about the nature of the fund, the limits of its liability in case of damage to property,
The concept of a second operator

- **Goal:** Liability rules should incentivise the producer to provide safe products and services

- **Challenge:** The operator is not necessarily best in place to control the risks
  - "Consumers" as end users may have little capacity to control risks
  - Producers may have strong control over the use of the product
The concept of a second operator

- Suggestion of the expert group: Producer as second Operator

- Expert Group key finding:

  [11] If there are two or more operators, in particular
  (a) the person primarily deciding on and benefitting from the use of the relevant technology (frontend operator) and
  (b) the person continuously defining the features of the relevant technology and providing essential and ongoing backend support (backend operator), strict liability should lie with the one who has more control over the risks of the operation.
The responsibility of the producer

Product liability and Artificial Intelligence
**Behaviour as a defect?**

- **Question**
  - Is an individual occurrence of defective behaviour in itself a defect of the product which generated such defective behaviour?

- **Examples**
  - a driving error by an autonomous car
  - an incorrect answer given by a Robo-Advisor
Product liability and Artificial Intelligence

- **Concepts**
  - Defective behaviour constitutes a product defect
  - Defective behaviour is not a product defect
  - Autonomous cars are not defective when they are, on average, better than human drivers

- Monitoring and updating of systems
- Technical development and defect
Product liability and Artificial Intelligence

Expert Group key findings:

[16] Operators of emerging digital technologies should have to comply with an adapted range of duties of care, including with regard to
(a) choosing the right system for the right task and skills;
(b) monitoring the system; and
(c) maintaining the system.

[17] Producers, whether or not they incidentally also act as operators within the meaning of [10], should have to:
(a) design, describe and market products in a way effectively enabling operators to comply with the duties under [16]; and
(b) adequately monitor the product after putting it into circulation.
Conclusion and theses
Need for further development of the Legal Framework

1. The existing liability system contains gaps and must be developed further.

2. A new system of liability for autonomous systems should be introduced to guarantee compensation for victims.
3. Objective liability should be a central element of the liability system for new technology.
   a) In general, operators of autonomous systems should be liable to compensate victims.
   b) In addition, objective liability of producers should be introduced in some cases.
Need for further development of the Legal Framework

4. Insurance is an important instrument in controlling the allocation of risk in connection with autonomous systems.

5. Compensation funds can supplement compulsory third-party insurance and should be implemented in this area.
Need for further development of the Legal Framework

6. As an element of the liability system duties to adequately train and monitor autonomous systems based on machine learning should be recognised and clarified.
Thank you very much!

Prof. Dr. Georg Borges
georg.borges@uni-saarland.de
www.rechtsinformatik.saarland