

Autonomics – Legal Framework and challenges in Germany and Europe

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Law and new technologies

- The development of new technologies depends on the normative (i.e. moral and legal) framework
- Law as an obstacle for technological development
- Law as a „technology booster“



Research Centre for Robot Law

- University of Würzburg, Faculty of Law
- Founded in 2010
- Numerous activities
 - Internet Law/Internet of the Future
 - Robotics and the Law (2010, DFG)
 - European Greenbook on Law and Robotics
 - Legal Questions of the Use of Service Robots for the Elderly
 - Autonomous Cars and the Law
 - Autonomics and the law



Starting points

- Modern technology is developing rapidly in many areas
- The law must react to, control and possibly limit these changes
- In many areas such as biotechnology and computer law, this is already done quite successfully
- So far, autonomous systems have been neglected

Challenges – technological perspective

- Autonomous cars
- Service robots in hospitals/homes for the elderly
- Robots for medical purposes (e.g. operations)
- Autonomous systems for industrial purposes
- Military robots (drones)
- ...



Challenges – legal perspective

- Admission
- Data protection/privacy
- Insurance
- Civil liability
- Criminal liability
- ...




National vs. European approach

- One technology – many divergent legal systems
- From a practical point of view, national law is more important
- European Harmonisation would be helpful, but it seems far away
- Greenbook on Law and Robotics
- Importance of legal comparison !



Methodology

- Cooperation between law and technology poses many interdisciplinary challenges
- General approach vs. bottom up-approach



General approach to the topic „autonomous systems an the law“

- Can autonomous systems/robots be „persons“ ?
- Can autonomous systems/robots be punished ?
- Can/Should autonomous systems/robots have (human) rights?

Bottom up-approach

- Analysis of the autonomous system (industrial robot, car, service robot ...)
- Identification of legal problems
- Systematic exposure of legal problems
- Formulation of tentative solutions
- Criticism of these solutions in the light of practical applicability
- Formulation of improved solutions
- ...

Kinds of Solutions

- Many problems can be solved inside the law as it is existing now
- Necessity of extensive interpretation of given law
- Necessity of new law ?
 - Admission of autonomous cars?
 - Liability for damages caused by autonomous systems – do we need new forms of insurance?
 - Reform of privacy law?
- Comparison between different legal systems and even legal cultures
- International harmonization as the ultimate goal?



- Thank you for listening!