### KINSTELLAR



### **Regulation of Autonomous Vehicles**

Dr. Ákos Nagy **CEE** Automotive Forum 20 November 2019

#### Content



### Who are we?

Kinstellar is Emerging Europe and Central Asia's leading independent law firm. We provide comprehensive support and practical solutions for our clients to deal effectively with any complex business challenges related to their automotive projects and investments.

10

countries

200 +

lawyers





### **Current regulation**





### Why autonomous driving will have positive effects?



Safer (if works well) – no direct human factor



Improve mobility efficiency



Reduce pollution



More free time / more effective commuting



Less parking structure



Further enhancement of car sharing

### Regulation in the EU

#### No directive / regulation

#### Steps to achieve a coordinated approach in the EU

- Declaration of Amsterdam (2016) about cooperation between the Member States, the Commission and industry in the field of connected and automated driving
- Parliament resolution (2018) on a European strategy on Cooperative Intelligent Transport Systems
- Commission communication (2018) 'On the road to automated mobility: An EU strategy for mobility of the future'

#### EU Parliament resolution on autonomous driving

- EU to be **world leader** in deploying **safe systems**
- Developing **digital technologies / AI** to offset human error
- Strategy to be formulated

### Regulation in the CEE region (Hungary)



Decree from 2017 (1990) on registration and maintenance in traffic of road vehicles

- On roads closed from traffic
- Test tracks
- Public roads under strict rules



**Definition: Non-autonomous / Autonomous for development** 



Levels of automation: Society of Automobile Engineers

- Non-autonomous vehicle for development
  - No automation
  - Driver assistance
  - Partial automation
- Autonomous vehicle for development of partial automation
  - Conditional automation
  - High automation
- Autonomous vehicle for development of full automation



#### Testing under strict rules

# Regulation in the CEE region (Czech Republic / Slovakia / Bulgaria / Romania)



No express regulation and either prohibited (CZ) or simply lack of express provisions (BU/SLO)



### Regulation in the USA



#### 29 States enacted legislation

- Florida: valid driver's license autonomous driving allowed, even without driver (with means to disengage)
- California: testing allowed without steering wheel/brake pedal
- **Michigan** (American Center for Mobility): use of public roads

Guidelines in federal level: the Automated Vehicles 3.0: Preparing for the Future of Transportation 3.0



National Highway Safety Traffic Administration: list of "Best Practices"

- a "technology-neutral" environment
- licensing and registration procedures (including insurance)
- reporting and communications methods for public safety officials

### Regulation in China



**Regulation quite late / road test licences** 



Beijing: allowing testing on most roads / issuing the highest number of licenses (5,000 km)



Shanghai: allowing self-driving cars to carry passengers



World's largest market for autonomous vehicles





### Key issues and legal challenges

### Liability



Objective liability for hazardous operations: (a) *test mode* – vehicle developer; (b) *public roads* – operator



Liability for hardware / software Insurance

#### **National Highway Safety Traffic Administration / AIA:**

- Allocation of liability by law: owners, operators, passengers, manufacturers, suppliers
- Insurance regulation: vehicle insurance





A robot may not injure a human being or, through inaction, allow a human being to come to harm.

A robot must obey the orders given it by human beings except where such orders would conflict with the First Law. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

### Ethical issues: Global laws needed!

## German Federal Ministry of Transport and Digital Infrastructure (2017) guidelines

- 1. Protection of individuals
- "Trolley" problem (which life(s) prevail)
- Technological systems cannot replace decision of a responsible driver
- Distinction on personal features NOT allowed

- 5. Accountability from operator to manufacturers / operators
- Vehicle owners and users decide the use of their vehicle data
- Self-learning systems (if improves safety)

#### Key issues

Global regulation is best!

#### OR

Different regulation in EU/US/China

Consequences will be completely different / affect production / sales globally if regulation will be different!

### Data / e-privacy

#### Autonomous AND/OR connected

- Data about the exact location / how / where drivers operate their cars.
- Limitations and different rules (permissions) affect on operation / safety / in connected driving
- Availability of data to public authorities / states
- Local regulation needed everywhere: Sharing the same data could result in penalties by authorities!

## Hong Kong (2017) / data privacy and security guidance on the development of automated and connected car technologies

- Minimize collection and retention of personal data
- Easy-to-use privacy controls
- Implement secure data storage technologies
- Develop technologies to prevent unauthorized access to data
- Safeguards against unlawful tracking of drivers



### Any questions?

