Current laws on the development of autonomous vehicles

The development of artificial intelligence laws are highly influenced by **Isaac Asimov**'s three laws of robotics:

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

Second Law: A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

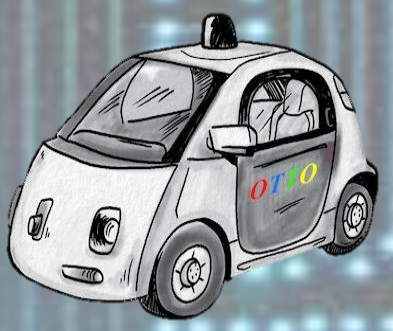
Third Law: A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

The following legislation is designed to regulate artificial intelligence of **autonomous vehicles**:

(1) **Self Drive Act** – ensures the safety of highly automated vehicles by encouraging the testing and deployment of such vehicles. It pre-empts states from enacting laws regarding the design, construction, or performance of highly automated vehicles or automated driving systems unless such laws enact standards identical to federal standards.

(2) **The AV Start Act** – addresses driverless vehicles; (1) ensures the safety of highly automated vehicles (HAVs) (2) pre-empts states from adopting, maintaining, or enforcing any law, rule, or standard regulating an HAV or automated driving system (ADS) regarding certain safety evaluation report subject areas.

(3) **Future of AI Act** - designed to establish an advisory committee for artificial intelligence issues.



EXAMPLES OF ISSUES RELATING TO THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE:

National competitiveness;

National workforce;

Education to prepare workers as employers' needs change;

Open sharing of data and research on artificial intelligence; and

International cooperation and competitiveness.

Law in the Age of Artificial Intelligence

- Autonomous Vehicles

CURRENT PROGRESS ON AUTONOMOUS VEHICLES IN EUROPE:

- The Dutch presidency, at a meeting in April 2016, the European Union's transport ministers agreed to support a number of measures to harmonise traffic and transport rules to create a regulatory environment that would make the operation of autonomous cars a possibility across the EU by 2019.
- The German transport minister has proposed a bill to provide a legal framework for the use of autonomous vehicles, aiming to put fully autonomous vehicles on an equal legal footing to human drivers.
- The French government has recently given approval for autonomous vehicles to be tested on public roads in the country without special permits or restrictions.
- Over the past two years, the UK government has said it is keen for the UK to become a testing ground for autonomous vehicle technology. The UK stands to benefit from the fact that it is one of the few European countries which has not ratified the UN Convention on Road Traffic, which requires that a driver must be in the front seat of a car.

LEGAL PROBLEM ONE:

Slow progress of EU legislation:

There is industry criticism that the EU is failing to move fast enough to introduce changes to vehicle safety tests and the EU legislation may progress too slowly to be of assistance in coordinating and synchronising development of ITS (intelligent transportation systems).

LEGAL SOLUTION ONE:

The adoption of legislation at EU level would provide clear parameters for the development and implementation of ITS. Both at EU and national level there have been consultation exercises seeking input from stakeholders and stakeholders should use these platforms to encourage early enactment of EU legislation.

LEGAL PROBLEM TWO:

Attributing liability:

Due to the consideration of autonomous decision making, the autonomous vehicle cannot be given legal personhood, however in the case of an accident due to systematic error in the vehicle, the owner of the vehicle cannot be held responsible either, so who will be held liable?

LEGAL SOLUTION TWO:

In order to limit owner or manufacturer liability, the ITS tech can be programmed to incorporate override options (such as route change options) and the owner's preferences (such as how the owner would react at the issue) which will allow the owners to retain some control over the vehicle and a level of liability for the vehicle's reaction.

SHREE KHANDELWAL