

MOOT COURT PROBLEM

JAN RAKSHA, YUVA ROZGAR AND ORS.

VS.

UNION OF ATHEA.

Athea is a fast developing South Asian Country with a large population of 1.324 billion. It is the second most populated country in the world with diverse language, religion and culture. Athea has been striving towards attracting investments to strengthen its economy and to build good trade relations with other nations. It ranks third among the most attractive investment destinations for technology transactions in the world and has a strong focus on science and technology, realizing that it is a key element of economic growth.

Attracted by the latest technology in autonomous vehicles, (Refer Annexure II) the Consortium of Automobile Manufacturers of Athea (C.A.M.A) strives towards advancement of automotive technology and to provide quality service to auto industry. They plan to provide research and development, testing, certification, calibration and skill development service for developing safe, reliable and eco-friendly vehicles and components, harmonizing Athea's automotive standards to global standards.

The Consortium of Automobile Manufacturers of Athea (C.A.M.A) approached the Minister of Road Transport and Highways, Athea, to convince him to have legislation for allowing autonomous vehicles on Athea's roads as it would make Athea on par with the automotive technology of American and European countries. They impressed upon the Minister

about the following potential benefits among others:

1. Increased safety and customer satisfaction.
2. Reduction in accident injuries and less need for insurance.
3. Relieves travelers from driving and navigation chores.
4. Significant reduction in traffic collisions and number of accidents.
5. Reduction of crime.
6. Enhanced mobility for children, elderly and disabled.
7. Reduction in congestion and creating a healthier environment.
8. Improve productivity, lower fuel consumption and significantly reduction of parking space.

The Minister for Road Transport and Highways, Government of Athea, introduced a Bill in the parliament to insert a new chapter related to the autonomous vehicles in the Athea Motor Vehicles Act, 1988.

The Athea Motor Vehicles Act, 1988 which is verbatim same as the Motor Vehicles Act, 1988 of India, contained 217 Sections and 14 chapters prior to the amendment. The Athea Motor Vehicles (Amendment) Act, 2016 introduced Chapter 15 (Section 218) in the Act, with new provisions relating to autonomous vehicles (Refer Annexure I). This new chapter gives legislative sanction to the testing and then allowing the autonomous vehicles to function on the roads of Athea, subject to the Rules made by

the State Governments in this behalf.

Meanwhile, the automobile manufacturers who were not members of C.A.M.A started Anti Autonomous Vehicle Campaign (A.A.V.C) and raised certain doubts on the feasibility of such vehicles. Their argument is that autonomous vehicles are not feasible on Athean Roads. There would be legal issues relating to Accident and Insurance claims, increased burden on telecommunications sector, potential cyber-attacks and privacy related issues. They also raised doubt about the safety of permitting the autonomous vehicles to share the same roads as vehicles driven by human drivers.

Meanwhile, Mr. John Brown of Ohio, U.S.A, who owned a self driven car for nine months, was killed in a car crash while he was in an automated self driven car on highway. The car's sensors system failed to distinguish a large white 18-wheel truck and trailer crossing the highway. This raised a furor among the public as it substantiated the doubts raised by the A.A.V.C. By this incident, A.A.V.C started gaining public confidence.

"Jan Rakshan", an N.G.O fighting for the rights of the people, approached the Supreme Court of Athea claiming that the Athea Motor Vehicles (Amendment) Act, 2016 is unconstitutional inasmuch as it infringes the fundamental rights to life guaranteed under art. 21 of the Constitution of Athea which is exactly the same as the Constitution of India, and also the right to privacy which is again recently declared to be a fundamental right by the Supreme Court of Athea. (Case 1)

"Yuva Rozgaar" is an N.G.O based in Delhi and

operating since 1992. It is one of the largest N.G.Os working to address the concern of underprivileged youth in the State of Athea. The N.G.O provides technical training along with a driving course to the poor students so that they are employed as drivers by potential companies for the job of drivers. The new amendment to the Motor Vehicles Act, 1988 by the Government of Athea created a sense of insecurity in the minds of the young persons who are undergoing training for driving at the N.G.O. The N.G.O alleges that it is injustice to these poor underprivileged persons who are looking forward for jobs as drivers in companies. If the government allows autonomous vehicles it will be surely affecting the rights of livelihood of these persons.

In the meantime, Athea Drivers Union (A.D.U), a trade union for the drivers of Athea, also started a campaign against the autonomous vehicles on the ground that their introduction in Athea will affect the livelihood of the drivers as they may lose their jobs in large numbers. Their contention is that during the present recession period in the economy, it is very difficult to find alternative jobs. Also, many of them are of advance age, where at this stage it becomes difficult for them to cope up and learn with new skills to secure alternative employment. Further, many young people, who are hoping to get employment as drivers will also be badly affected.

The "Yuva Rozgaar" (N.G.O) and Athea Drivers Union (A.D.U) have jointly approached the Supreme Court for striking down the new Chapter 15 - Section 218 inserted via Motor Vehicle (Amendment) Act, 2016 as

unconstitutional as it infringes right to life which includes right to livelihood, guaranteed under the Constitution of Athea. (Case 2)

Both the cases have been posted for hearing. As there is a close connection between the cases they will be heard together. The following points are for consideration of the Honorable Supreme Court of Athea:

1. Does the amendment to the Motor Vehicles Act, 1988 violate the Right to Privacy?
2. Does the amendment violate Article 21 by creating threat to the lives of the persons using autonomous vehicles and of those who are sharing the road with them?
3. Does the impugned amendment violate Article 19(1) (g) and Article 21 by affecting the livelihood of drivers and potential drivers?

detection, crash avoidance, emergency braking, parking assistance, adaptive cruise control, lane keeping assistance, lane departure warning, or traffic jam and queuing assistance, unless any such system, alone or in combination with any other system, enables the vehicle on which the system is installed to be driven without the active control or monitoring of a human operator.

(b) "autonomous vehicle" means a motor vehicle that is equipped with autonomous technology.

(c) "department" means the Road Transport and Highways Department of the Government of Athea.

(d) "highway" means the entire width between the boundary lines of every way dedicated to a public authority when any part of the way is open to the use of the public for purposes of vehicular traffic, whether or not the public authority is maintaining the way.

ANNEXURE - I

CHAPTER 15

AUTONOMOUS VEHICLES

Section 218-

1) Testing and use of autonomous vehicles: In this chapter, unless there is anything repugnant in the subject or context,

(a) "autonomous technology" means technology which is installed on a motor vehicle and which has the capability to drive the motor vehicle without the active control or monitoring of a human operator. The term does not include an active safety system or a system for driver assistance, including, without limitation, a system to provide electronic blind spot

2) Testing autonomous vehicle: Before a person or entity begins testing an autonomous vehicle on a highway, the person or entity shall-

(a) submit to the Department a proof of insurance or self-insurance acceptable to the Department for an amount not less than Rupees 50,00,000; or

(b) make a cash deposit or post and maintain a surety bond or other acceptable form of security with the Department in the amount of Rupees 50,00,000.

(c) If an autonomous vehicle is being

tested on a highway, a human operator shall be-

(i) seated in a position which allows the human operator to take immediate manual control of the autonomous vehicle;

(ii) monitoring the safe operation of the autonomous vehicle; and

(iii) capable of taking over immediate manual control of the autonomous vehicle in the event of a failure of the autonomous technology or other emergency.

(d) No autonomous vehicle shall be tested on a road other than a highway.

(e) An autonomous vehicle shall not be tested on a highway unless the autonomous vehicle is:

(i) equipped with a means to engage and disengage the autonomous technology which is easily accessible to the human operator of the autonomous vehicle;

(ii) equipped with a visual indicator located inside the autonomous vehicle which indicates when autonomous technology is operating the autonomous vehicle;

(iii) equipped with a means to alert the human operator to take manual control of the autonomous vehicle if a failure of the autonomous technology has been detected and such failure affects the ability of the autonomous technology to operate safely the autonomous vehicle; and

(iv) capable of being operated in

compliance with the applicable motor vehicle laws and traffic laws of this State.

3) Manufacture or import of autonomous vehicle:

(a) After the successful testing of the vehicle, any person or body corporate desirous of manufacturing the vehicle for use on roads of Athea, shall submit it to the test of Committee of Experts constituted by the Department, and only after being satisfied that the vehicle is fit to be used on the roads, the Department shall issue a Certificate of Fitness for manufacturing the vehicle.

(b) A vehicle manufactured by complying with the requirements of clause (a) shall also meet the standards for registration as provided under this Act and shall also meet the requirements for testing or operating upon highways, as may be prescribed by the Rules made by the Central Government in this behalf.

(c) The requirements of clauses (a) and (b) shall also apply, with necessary modification, to the vehicles imported into Athea.

(d) Any person who manufactures or imports into Athea, an autonomous vehicle without complying with the requirements of clauses (a) and (b) of this sub-section shall be liable for rigorous imprisonment for a term of not less than three years and which shall extend to a term of ten years, and shall also be liable for fine which may extend to Rs. 1 Crore.

4) Use of autonomous vehicle:

(a) No autonomous vehicle which is manufactured or imported in contravention of sub-section (3) of this section shall be used on a public road.

(b) Every autonomous vehicle shall, before it is used on road, have a registration certificate issued by the Central Government in addition to any other documents as may be required under any other provision of this Act.

(c) The driving license of the person in control of an autonomous vehicle shall bear an endorsement made by the Department recognizing the fact that he is not required to actively drive the vehicle.

(d) Any person who uses or causes to be used, an autonomous vehicle in contravention of clauses (a) to (c) of this sub-section shall be liable to imprisonment of either description which may extend to five years, with or without a fine which may extend to Rs. 5 lakhs.

5) Manufacturer not liable for certain damages:

The manufacturer of a motor vehicle that has been converted by a third party into an autonomous vehicle is not liable for damages to any person injured due to a defect caused by the conversion of the motor vehicle or by any equipment installed to facilitate the conversion unless the defect that caused the injury was present in the vehicle as originally manufactured.

6) Rule-making powers:

(a) The Central Government shall make Rules for authorizing the operation of autonomous vehicles on highways within the State of Athea.

(b) The Rules to be made under sub-section (a) shall-

(i) set forth the requirements that an autonomous vehicle must meet before it may be operated on a highway within this State;

(ii) set forth requirements for the insurance that is required to test or operate an autonomous vehicle on a highway within this State;

(iii) establish minimum safety standards for autonomous vehicles and their operation;

(iv) provide for the testing of autonomous vehicles;

(v) restrict the testing of autonomous vehicles to specified geographic areas; and

(vi) set forth such other requirements as the Department determines to be necessary.

(c) The Department shall by making Rules establish a driver's license endorsement for the operation of an autonomous vehicle on the highways. The driver's license endorsement described in this section must, in its restrictions or lack thereof, recognize the fact that a person is not required to actively drive an autonomous vehicle.

ANNEXURE II

"AUTONOMOUS VEHICLE"

An autonomous vehicle (sometimes called a driverless vehicle, a self-driving vehicle, an automated vehicle or an autonomous vehicle) is a robotic vehicle that is designed to travel between destinations without a human operator. To qualify as fully autonomous, a vehicle must be able to navigate without human intervention to a predetermined destination over roads that have not been adapted for its use. There are several systems that work in conjunction with each other to control an autonomous vehicle. Like the ultrasonic sensors in the wheels can detect the position of curbs and other vehicles when parking, a central computer analyses all of the data from the various sensors to manipulate the steering, acceleration and braking, radar sensors dotted around the vehicle monitor the position of vehicles nearby; video cameras detect traffic lights, read road signs and keep track of other vehicles, while also looking out for pedestrians and other obstacles. L.I.D.A.R (Light Detection and Ranging - a technology similar to radar) sensors help to detect the edges of roads and identify lane markings by bouncing pulses of light off the vehicle's surroundings. Autonomous vehicles work in the following way:

- a. The "driver" sets a destination. The vehicle's software calculates a route and starts the vehicle on its way.
- b. A rotating, roof-mounted L.I.D.A.R (Light Detection and Ranging - a technology similar to radar) sensor monitors a 60-meter range around the

vehicle and creates a dynamic 3-D map of the vehicle's current environment.

- c. The vehicle communicates through radio frequency with other autonomous vehicles (V2V communication) in that range and decides its movements to avoid accident.
- d. Towers erected by the State at various points on the road also communicate with the vehicle (V2T communication) and monitor the vehicle's position, speed and movement to find the possibilities of accidents due to misjudgment of the environment by the vehicle and also due to any failure of autonomous system, to alert the person in control of the autonomous vehicle.
- e. A sensor on the left rear wheel monitors sideways movement to detect the vehicle's position relative to the 3-D map.
- f. Radar systems in the front and rear bumpers calculate distances to obstacles.
- g. Artificial intelligence (AI) software in the vehicle is connected to all the sensors and has input from Google Street View and video cameras inside the vehicle.
- i. The vehicle's software consults Google Maps for advance notice of things like landmarks and traffic signs and lights.
- j. An override function is available to allow a human to take control of the vehicle.