

ABSTRACT

The invention is an Autonomous Lane Intelligent Visual Enhanced (hereinafter referred to as “*ALIVE*”) System, comprising a plurality of autonomous traffic cone robots, specifically and intelligently designed for use in marking the affected lanes of the road, for the purpose of providing visual and sufficient safety distance warning signals of the road hazards to the other road users. The *ALIVE* system is to be operated in tandem with a base operator with a mobile device, through a command and control and communications system, in the form of an APP installed, in the mobile phone or computer. The base operator is most probably seated at the command and safety vehicle, located just ahead of his/her plurality of autonomous traffic cone robots. In one preferred form, when the command and safety vehicle arrives at the destination, through the deployment mechanism, the autonomous traffic cone robots ordinarily stored in quick-release racks are released manually or automatically onto the road surface. The base operator will deploy these autonomous traffic cone robots, based on a pre-arranged or in-situ configuration and mission. The autonomous traffic cone robots will then proceed to station at their designated relative positions. As the command and safety vehicle moves, these autonomous traffic cone robots shall station and follow their pre-destined relative positions, with the last few and/or all traffic cone robots performing video incident recording and reporting. Once the mission is completed, these autonomous traffic cone robots shall re-gather and return to their docking storage racks for automatic power charging to be ready for the next mission. The invention involves method, hardware and software implementations.

Fig 1