The Use of Cooperative Systems in Traffic and Transport

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Abstract: In Traffic Cooperative Systems (TCS), vehicles communicate wirelessly with other vehicles, infrastructure (roads and related equipment) and other users (pedestrians, VRU, etc.). Compared to existing systems, cooperative systems technology allows two-way communication: V2V - Vehicle to vehicle, V2I - vehicle to infrastructure, V2U - vehicle with other users (e.g., VRU), also I2U - infrastructure with other users (e.g., VRU). The exchange of data between the vehicles and infrastructure is imperceptible by drivers until a potentially dangerous situation is detected, at which moment the drivers concerned will receive an alert. One example of Traffic Cooperative System is presented. The appropriate demonstration model is intended to inform the driver about the events of importance for traffic safety on the next section of the driving.

Keywords: Intelligent Transport Systems, Cooperative Systems, OSI model, Use cases, Demonstration model

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