

## Article 18.

### Regulation of Fully Autonomous Vehicles.

#### § 20-400. Definitions.

The following definitions apply in this Article:

- (1) Automated driving system. – The hardware and software that are collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether it is operating within a limited or unlimited operational design domain.
- (2) Dynamic driving task. – All of the real-time operational and tactical control functions required to operate a motor vehicle in motion or which has the engine running, such as:
  - a. Lateral vehicle motion control via steering.
  - b. Longitudinal motion control via acceleration and deceleration.
  - c. Monitoring the driving environment via object and event detection, recognition, classification, and response preparation.
  - d. Object and event response execution.
  - e. Maneuver planning.
  - f. Enhancing conspicuity via lighting, signaling, and gesturing.
- (3) Fully autonomous vehicle. – A motor vehicle equipped with an automated driving system that will not at any time require an occupant to perform any portion of the dynamic driving task when the automated driving system is engaged. If equipment that allows an occupant to perform any portion of the dynamic driving task is installed, it must be stowed or made unusable in such a manner that an occupant cannot assume control of the vehicle when the automated driving system is engaged.
- (4) Minimal risk condition. – An operating mode in which a fully autonomous vehicle with the automated driving system engaged achieves a reasonably safe state, bringing the vehicle to a complete stop, upon experiencing a failure of the automatic driving system that renders the vehicle unable to perform any portion of the dynamic driving task.
- (5) Operator. – For the purposes of this Article, is a person as defined in G.S. 20-4.01. An operator does not include an occupant within a fully autonomous vehicle performing solely strategic driving functions.
- (6) Operational design domain. – Specific conditions under which an automated driving system is limited to effectively operate, such as geographical limitations, roadway types, speed range, and environmental conditions.
- (7) Strategic driving functions. – Control of navigational parameters such as trip scheduling or the selection of destinations and waypoints but does not include any portion of the dynamic driving task. (2017-166, s. 1.)