

List of Questions

Goal: Start the conversation to determine if these are the best categories or data parameters that can help facilitate our discussion.

A. Machinery

1. Describe the type of equipment and the specific technology that is being used (name, manufacturer, model, type of sensors and other equipment being used).

 - a. Weight of the equipment
 - b. Horsepower
 - c. Speed range (lowest and highest operational speeds)
 - d. Type of sensors or equipment used to operate the equipment safely.
 - e. What safety measures have been put in place to protect workers?
 - f. Capable of recording technical information about the status and operation of the vehicle's autonomous technology sensors for 30 seconds prior to a collision?
 - g. Is this equipment manufactured as autonomous equipment, retrofitted or made from a kit?
 - h. Does your autonomous vehicle comply with one or more of the following?
 - CA Vehicle Code
 - J3016 202104 SAE Levels of automation
 - ISO 18497 Agricultural machinery and tractors
 - ISO 25119 Tractors and machinery for agriculture and forestry
 - Other (Please specify): _____

- i. Please provide image or link to the equipment.
2. Is the driver/observer capable of taking over immediate physical control of the vehicle if needed?
3. Does the autonomous vehicle have a mechanism to engage and disengage autonomous technology that is reachable while driving and easily accessible to the operator?
4. Does the autonomous vehicle have a visual indicator inside the cabin to indicate when the autonomous technology is engaged?
5. Has the operator/driver been trained in the limitations of the vehicles, autonomous technology (use and operation)?
6. Is the operator/driver capable of safely operating the vehicle in all conditions under which the vehicle is being tested (the operational design domain)?
7. Describe the operational design domain in which the autonomous equipment is designed to operate.
8. Describe any commonly occurring or restricted conditions, including but not limited to: snow, fog, black ice, wet road surfaces, construction zones, and geo-fencing by location or road type, under which the equipment are either designed to be incapable of operating or unable to operate reliably in autonomous mode.
9. State the mechanism for safely disengaging out of autonomous mode in the event of experiencing conditions outside of its operational design domain.
10. Describe how the vehicle is designed to react when it is outside of its operation design domain or encounters the commonly occurring or restricted conditions.

B. Data

11. Was the data collected with a driver/observer present either within immediate control of the vehicle or is actively monitoring the vehicle's operation?

12. Describe the following conditions/information associated with the equipment and data collection:

- a. When was this data collected?
- b. Length of collected time period.
- c. Under what field conditions was the data collected?
- d. What was the speed of the equipment when the data was collected?
- e. What type of agricultural tasks or operation was taking place when the data was collected?
- f. Where was the data collected (City, state)?
- g. Were employees working alongside the equipment or were workers located in the same field as the equipment?
 - i. If yes, what were they doing?

13. Would you be willing to share the data with us for further analysis?