

traditional driving controls, such as a steering wheel or gas and brake pedals.¹ According to Zoox, “In order to self-certify the Zoox robotaxi, a team of safety professionals with hundreds of years of collective experience developed and completed a series of physical tests, computer simulations, engineering analyses, and technical milestones to demonstrate that our vehicle meets - and where possible, exceeds - the criteria set forth by the FMVSS.”²

This Special Order requires information related to Zoox’s basis for certification that its “robotaxi”/VH6 vehicle complies with all applicable FMVSS. This Special Order is issued by the National Highway Traffic Safety Administration (NHTSA), an operating administration of the United States Department of Transportation, pursuant to 49 U.S.C. § 30166(g)(1)(A) and 49 C.F.R. §§ 510.7-510.8.³

Zoox’s response to this Special Order must be provided to NHTSA’s Office of Chief Counsel by **November 7, 2022**. The response should be sent to Sarah Sorg, Office of Chief Counsel, at Sarah.Sorg@dot.gov or, for large submissions, through the DOT Secure Large File Transfer Solution system.⁴

Zoox’s response must be signed under oath, *i.e.*, accompanied by a declaration, signed by a responsible officer of Zoox, stating that he/she has undertaken and directed an inquiry reasonably calculated to assure that the answers and production of documents are complete and correct, that he/she has caused the documents of Zoox to be searched diligently for information and documents responsive to this Special Order and produced them to NHTSA, and that the answers to the inquiries provided to NHTSA respond completely and correctly to this Special Order. 28 U.S.C. § 1746; 49 U.S.C. § 30166(g)(1)(A); 49 C.F.R. § 510.7.

¹ See “The next step on our journey to public roads,” available at <https://zoox.com/journal/self-certification/>

² *Id.*

³ See 49 C.F.R. §§ 1.95(a), 501.8(d)(3) (delegations of authority).

⁴ In order to use the File Transfer System, please email Sarah.Sorg@dot.gov for a link.

Failure to respond fully or truthfully to this Special Order may result in a referral to the United States Department of Justice for a civil action to compel responses, and may subject Zoox to civil penalties of up to \$24,423 per day, up to a maximum penalty of \$122,106,996 for a related series of daily violations. 49 U.S.C. §§ 30163(a)(1), 30165(a)(3); 49 C.F.R. § 578.6(a)(3). Falsifying or withholding information in response to this Special Order may also lead to criminal penalties of a fine or imprisonment of up to 15 years, or both. 49 U.S.C. § 30170(a)(1).

DEFINITIONS

Unless otherwise stated in the text, the following definitions apply to the information request set forth below:

- **Document**: “Document(s)” is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, documents generated through litigation, arbitration, or mediation, pleadings, mediation statements, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by Zoox, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note,

comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, “document(s)” also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by Zoox or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Zoox, Inc (Zoox):** “Zoox” or “you” means Zoox, Inc., dba Zoox Labs, Inc. and all other aliases, and all of its/their past and present officers and employees, and representatives that have safety-related or compliance information, whether assigned to its/their principal offices or any of its/their field or other locations, including all of its/their divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors (*e.g.*, test facilities that conduct compliance tests), consultants, attorneys and law firms and other persons engaged directly or indirectly (*e.g.*, employee of a consultant) by or under the control of Zoox (including all business units and persons previously referred to), who are or, in or after insert retroactive date, were involved in any way with any of the following related to the compliance of the subject vehicles with all applicable Federal Motor Vehicle Safety Standards (“FMVSS”) and/or Zoox’s certification thereof:
 - (a) design, analysis, modification or production;
 - (b) testing, assessment, or evaluation; or
 - (c) regulatory certification and/or compliance determination with any FMVSS.
- **Subject vehicles:** All vehicles certified by Zoox as complying with all applicable Federal Motor Vehicle Safety Standards, including the VH6.

INSTRUCTIONS

Please follow the instructions below when providing responses to the numbered information requests in the next section.

1. Your response to the Special Order shall be sent to Office of the Chief Counsel (NCC-100), National Highway Traffic Safety Administration by email to Sarah Sorg at Sarah.Sorg@dot.gov or through the DOT Secure Large File Transfer Solution system.⁵

⁵ In order to use the File Transfer System, please email Sarah.Sorg@dot.gov for a link.

2. Please repeat the applicable request verbatim above your response. After your response to each request, identify the source of the information and indicate the last date the information was gathered.

3. When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation. Please also be reminded that where a document responsive to a request is not in the English language, both the original document and an English translation of the document must be produced.

4. You are required to respond to every request listed in this Special Order. If you cannot respond to any specific request or subpart(s) thereof, please state the reason why you are unable to do so. If you are unable to respond because you do not have all or any of the precise information needed to respond, provide an estimate. If, on the basis of attorney-client, attorney work product, or other privilege, you do not submit one or more requested documents or items of information in response to this Special Order, you must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

5. After your response to each request, state whether you previously had any responsive documents that are no longer within your possession, custody, or control, including but not limited to because the documents were lost or destroyed. If such documents ever existed: describe the documents; identify the reason that the documents are no longer in your possession, custody, or control; identify the date that you last had the documents; and identify who may have

copies of such documents.

6. If you claim that any of the information or documents provided in response to this Special Order constitutes confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or is protected from disclosure pursuant to 18 U.S.C. § 1905, you must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 C.F.R. Part 512, to the Office of Chief Counsel (NCC-100), National Highway Traffic Safety Administration as instructed below.

7. To facilitate social distancing due to COVID-19, NHTSA is treating electronic submission as an acceptable method for submitting confidential business information (CBI) to the agency under 49 C.F.R. Part 512.⁶ Since Part 512 submissions are handled by NHTSA's Office of Chief Counsel, any Part 512 submission should be sent to the Office of Chief Counsel electronically. Specifically, any CBI submissions sent via email should be sent to Sarah Sorg at Sarah.Sorg@dot.gov. For CBI submissions via a secure file transfer application, Sarah Sorg (Sarah.Sorg@dot.gov) must be notified when files are submitted and have access to retrieve the submitted files. Please refer to "In re: Zoox FMVSS Certified Vehicle" in your response to this letter and in the subject line of any confidentiality request submitted to the Office of Chief Counsel.

At this time, regulated entities should not send a duplicate hardcopy of their electronic CBI submissions to DOT headquarters. Please note that these modified submission procedures are only to facilitate continued operations while maintaining appropriate social distancing due to COVID-19. Regular procedures for Part 512 submissions will resume upon further notice, when NHTSA and regulated entities discontinue operating primarily in telework status.

⁶ See <https://www.nhtsa.gov/coronavirus/submission-confidential-business-information>.

For questions about CBI issues, including these modified submission procedures, please contact Dan Rabinovitz in the Office of Chief Counsel at Daniel.Rabinovitz@dot.gov or 202-366-8534.

8. All documents shall be produced electronically, as described below, in a common format (*e.g.*, Word, PDF, Microsoft Access) or other electronic formats commonly used by Zoxx and discernable to NHTSA.

- a. Hard copy documents shall be imaged in PDF format. They shall be provided as multi-page PDFs with document level optical character recognition (OCR).
- b. Electronically Stored Information (ESI) shall be converted to multi-page PDFs and produced along with document level OCR/extracted text.
- c. You shall organize the documents as instructed in the request to which it responds or, if no instruction is given in a request, in chronological order by project, report, or other similar categorization responsive to that numbered request.
- d. After the documents are so organized, and in sequential order to the request to which each responds, you shall apply Bates Numbers to the entire production.
- e. You shall produce an index that lists the title of each document produced, the Bates Numbers on the document, and the request to which it corresponds.

9. When a request calls for a detailed, narrative response, do not identify business records or other documents in lieu of providing a written narrative. A response to a request for a written narrative that solely directs NHTSA to documents will be considered non-responsive, and may result in civil penalties. 49 U.S.C. §§ 30163(a)(1), 30165(a)(3); 49 C.F.R. § 578.6(a)(3). A response to a request for a detailed, narrative response that includes references to specific

Bates Number(s) in addition to a written narrative will not be considered a violation of this Instruction.

10. The singular includes the plural; the plural includes the singular. The masculine gender includes the feminine and neuter genders; and the neuter gender includes the masculine and feminine genders. “And” as well as “or” shall be construed either disjunctively or conjunctively, to bring within the scope of this Special Order all responses that might otherwise be construed to be outside its scope. “Each” shall be construed to include “every” and “every” shall be construed to include “each.” “Any” shall be construed to include “all” and “all” shall be construed to include “any.” The use of a verb in any tense shall be construed as the use of the verb in a past or present tense, whenever necessary to bring within the scope of the document requests all responses which might otherwise be construed to be outside its scope.

11. Zoot’s response to this Special Order must be under oath, *i.e.*, accompanied by a declaration, signed by a responsible officer of Zoot, stating that he/she has undertaken and directed an inquiry reasonably calculated to assure that the answers and production of documents are complete and correct, that he/she has caused the documents of Zoot to be searched diligently for information and documents responsive to this Special Order and produced them to NHTSA, and that the answers to the inquiries provided to NHTSA respond completely and correctly to this Special Order.

12. The requests in this Special Order are deemed to be continuing in nature so as to require additional or amended responses from you should you obtain or become aware of any new, additional, or differing responsive information or documents.

REQUESTS

1. For each subject vehicle, by make and model, provide the following:
 - a. The type classification of the vehicle as defined in 49 C.F.R. § 571.3 (e.g., passenger car, truck, multipurpose passenger vehicle, bus, etc).
 - b. A detailed narrative description of the vehicle sufficient to support the type classification provided above;
 - c. The gross vehicle weight rating (GVWR);
 - d. The maximum operational speed of the vehicle;
 - e. The SAE Automation Level of the vehicle (see SAE J3016 APR2021);
 - f. A description of the Operational Design Domain (e.g., maximum speed, road type/geometries, geographical, time-of-day restrictions, etc.) and include any weather (temperature, snow, rain, fog, hail, high winds, cloud cover, etc.) or other environmental conditions that may affect the performance of the vehicle's ADS;
 - g. A representative photograph of the certification label as affixed to a representative subject vehicle; and
 - h. The total number of vehicles Zoox has certified.

2. State in detail how Zoox determined which FMVSS (or parts thereof) were applicable to the subject vehicle.

3. State each and every FMVSS each subject vehicle was certified by Zoox as complying with.

4. For each and every FMVSS listed in response to the request above, provide a detailed summary of how Zoox determined that the subject vehicle complied with each standard. To the extent that a FMVSS allows for certification under more than one method or subpart, specifically identify the subpart that the subject vehicle was certified to. Specifically state whether Zoox performed engineering analyses, physical tests, simulations, or other means to determine compliance.

5. State whether Zoox had any indications of the subject vehicle not complying with an applicable FMVSS, regardless of whether a test, analysis or other means to evaluate compliance with an applicable FMVSS was considered a non-test, a failure, or otherwise invalid.

If the answer is yes, provide a narrative description of the FMVSS involved and why there was an indication that the subject vehicle did not comply with an applicable FMVSS.

6. Given that “driver” as defined in 49 C.F.R. § 571.3 is defined as “the occupant of a motor vehicle seated immediately behind the steering control system,” state if the subject vehicle has a driver. If the answer is yes, describe in detail who or what Zoox considers to be the driver.

7. Does Zoox contend that any FMVSS or aspect of an FMVSS does not apply to the subject vehicles because they lack a human driver that would otherwise apply if the vehicles had a human driver? If yes, state the FMVSS or aspect of an FMVSS that Zoox contends does not apply and describe with specificity the basis of that contention, including whether it was necessary to Zoox’s certification.

8. Does Zoox contend that any FMVSS or aspect of an FMVSS does not apply to the subject vehicles because they lack conventional manual controls or other equipment for use by a human driver (including, but not limited to, a brake pedal, gas pedal, steering wheel, mirrors, and telltales) that would otherwise apply if the vehicles had such conventional manual controls or other equipment for use by a human driver? If yes, state the FMVSS or aspect of an FMVSS that Zoox contends does not apply and describe with specificity the basis of that contention, including whether it was necessary to Zoox’s certification.

9. 49 C.F.R. § 571.101 (FMVSS No. 101) S4 defines control as “the hand-operated part of a device that enables the driver to change the state or functioning of the vehicle or a vehicle subsystem.” FMVSS No. 101 S5.1.1 and S5.1.2 specify under certain conditions that certain controls “must be located so they are operable by the driver” and that certain telltales and indicators “must be located so that, when activated, they are visible to a driver.” Other

requirements in S5.2.6 stipulate that identifications for certain controls, telltale, and indicators “must appear to the driver to be perceptually upright.” Explain whether and, if so, how the subject vehicles are equipped with controls, telltales, and indicators meeting these requirements.

10. Zoox has publicly stated “Cars have windshield wipers to ensure that visibility isn’t occluded in the rain. Zoox isn’t a car so it doesn’t have that issue. We do, however, have sensors that must be clear of water and debris to function.”⁷ 49 C.F.R. § 571.104 (FMVSS No. 104) S4.1 specifies “Each vehicle shall have a power-driven windshield wiping system.” State whether and, if so, how the subject vehicles have a power-driven windshield wiping system. If the subject vehicles have a power-driven windshield wiping system, provide a representative photograph of the power-driven windshield wiping system and any data or reports demonstrating compliance with FMVSS No. 104.

11. The subject vehicle appears to be bi-directional. Given that what constitutes the front and rear of the vehicle may be critical to numerous provisions of FMVSS, describe in detail how Zoox determined what was the “front” and what was the “rear” of the vehicle, and how such determinations affected the certification of the subject vehicle.

12. State whether your vehicle is capable of going in reverse, and if so, detail under which circumstances the vehicle could go in reverse.

13. State whether the subject vehicle has a turn signal operative unit that is self-canceling by steering wheel rotation. Also state whether the subject vehicle has a manually operated control of a turn signal operating unit. If the answer to any of the previous questions is no, provide in detail how Zoox determined that the subject vehicle complied with FMVSS 108 S9.1.1.

⁷ <https://twitter.com/zoox/status/1524065805926764544>.

14. FMVSS No. 111 contains requirements for rear visibility. To the extent that you do not believe that any or all of FMVSS No. 111 S5 is applicable to the subject vehicle, state all reasons why.

15. State whether the subject vehicle has an inside rearview mirror of unit magnification. If yes, please describe it in detail and provide a drawing demonstrating its location in the subject vehicle.

16. State whether the subject vehicle has an outside mirror(s) of unit magnification. If yes, please describe in detail and provide a drawing demonstrating its location(s) on the subject vehicle.

17. State whether the subject vehicle has a rearview image meeting the requirements of FMVSS No. 111 S5.5.1 through S5.5.7. If yes, please describe it in detail and provide a drawing demonstrating its location in the subject vehicle.

18. Given the Agency's position that manufacturers are not permitted to certify vehicles as compliant if they do not meet all applicable performance standards (including any particular section of a performance standard or subcomponent thereof) and given the Agency's position that manufacturer of a vehicle without a brake pedal could not certify to 49 C.F.R. § 571.135 (FMVSS No. 135) S5.3.1,⁸ provide in detail how Zoox determined that the subject vehicle (which does not appear to have a foot control or brake pedal) complies with the specific requirement in FMVSS 135 S5.3.1. Address in your answer whether and, if so, how Zoox's stated disagreement with NHTSA's position on FMVSS No. 135, as reflected in a public

⁸ Notice Regarding the Applicability of NHTSA FMVSS Test Procedures to Certifying Manufacturers, 85 Fed. Reg. 83143, 83148 (Dec. 21, 2020).

comment dated January 20, 2021,⁹ relates to Zoox's determination that the subject vehicle complies with FMVSS No. 135.


19. In light of the Agency's stated position in *Final Rule, Occupant Protection for Vehicles with Automated Driving Systems*, 87 Fed. Reg. 18560, 18567 n.29 (Mar. 30, 2022) that other regulatory changes to the FMVSS not impacted by the rulemaking (*e.g.*, with regard to the 100-Series FMVSSs) would likely be necessary to permit a vehicle solely operated by an ADS to be manufactured for sale (absent an exemption to the FMVSS under 49 C.F.R Part 555) provide a detailed explanation how the subject vehicles comply without any exemption under 49 C.F.R. Part 555.

20. State whether each subject vehicle has a Vehicle Identification Number (VIN) assigned in accordance with 49 CFR Part 565, and state whether you have submitted the information required in 49 CFR 565 to NHTSA.

- a. If you have not assigned VINs to the subject vehicles or if you have not reported VIN information to NHTSA in accordance with 49 CFR Part 565, please provide a detailed status update, including an estimated time frame that the vehicles will be marked with a proper VIN and when the VIN decoding information will be provided to NHTSA.
- b. If you have assigned VINs to subject vehicles, state when you first affixed the VIN to a subject vehicle and when you first provided the VIN deciphering information to NHTSA. Provide a representative photograph of the VIN as affixed on a representative subject vehicle.

⁹ <https://www.regulations.gov/comment/NHTSA-2020-0119-0009>.

Dated: September 6, 2022

 Digitally signed by ANN
ELIZABETH CARLSON
Date: 2022.09.06
09:34:40 -04'00'

Ann Carlson
Chief Counsel