

Garmin dēzl™ Trucking Navigator Compatibility to Automatic on-board Recording Device (AOBRD) Requirements, Part 395.15

1 Introduction

The [Garmin dēzl™ trucking navigators](#), when integrated with a telematic data transponder manufactured by one of Garmin's authorized partners and used for recording of driver's Hours-of-Service (HOS), will further enable a motor carrier to comply with the Federal Motor Carrier Safety Administration (FMCSA) Automatic on-board Recording Device (AOBRD) requirements, Part 395.15. Authorized partners are Garmin's Mobile Resource Management (MRM) partners that have:

- Integrated their telematic data transponders with the Garmin dēzl using Garmin's Fleet Management interface cable and provided software development kit (SDK).
- Implemented the Garmin Fleet Management Interface complete with AOBRD protocol support in the software of the partner's telematic data transponder.
- Enabled the AOBRD protocol between the telematic data transponder and the Garmin dēzl.

A list of Garmin MRM partners can be found at [Garmin Commercial Solutions](#).

Garmin does not represent that the use of an authorized partner's solution will provide compliance with the §395.15 specification. Such representations can only be made by the partner. Please review the telematic data transponder manufacturer's documentation to verify AOBRD requirement compliance when used with the dēzl.

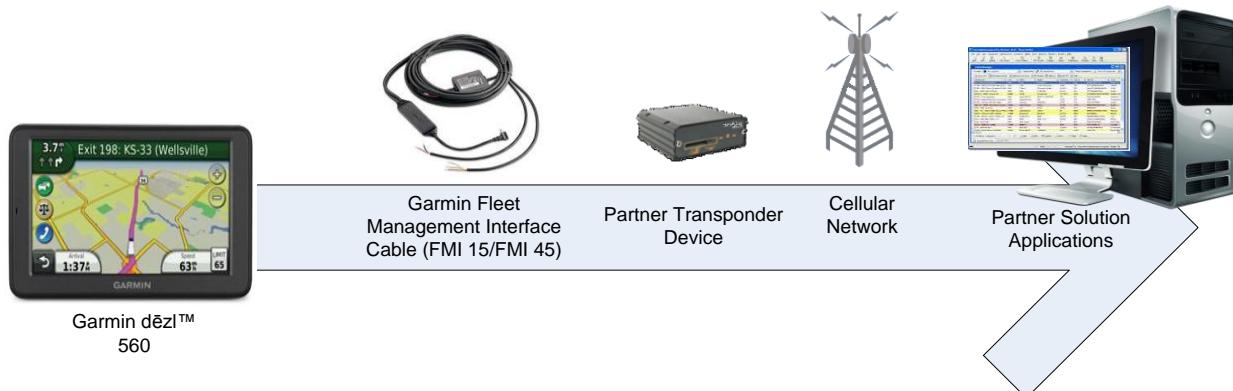


Figure 1: Example of a dēzl™ 560 as part of a Garmin Partner Fleet Management Solution

2 Compatibility to AOBRD Requirements

This statement is provided by Garmin for purpose of identifying requirements of the §395.15 specification that are met by the Hours-of-Service (HOS) application supported by the dēzl. Compliance with the provisions of §395.15 is described in the following table. Paragraph references of the respective §395.15 requirements are noted along with a description of how the feature is supported by the dēzl.

For the complete text of §395.15, please refer to [FMCSA](#) rules and regulations.

§395.15 Paragraph	Compatibility of Garmin dēzl™
(a)(1), (a)(2)	Responsibility of motor carrier. The dēzl may be used as part of an AOBRD solution by the motor carrier.
(b)(1)	Supports electronic display of a driver's hours-of-service charts, showing the time and sequence of duty status changes including the driver's starting time at the beginning of each day.
(b)(2)	Provides a means whereby authorized Federal, State, or local officials can immediately check the status of a driver's hours-of-service for the previous 7 or 8 days.
(b)(3)	<p>The dēzl enables support systems to provide summaries of individual driver's hours-of-service to include the following information as specified by Part §395.8:</p> <ul style="list-style-type: none">(1) Date(2) Total miles driving today(3) Truck or tractor and trailer number(4) Name of carrier(5) Driver's signature/certification (supported by driver validation of each duty status change)(6) 24-hour period starting time(7) Main office address (This data is not provided by the PND. That requirement is the responsibility of the partner's AOBRD solution)(8) Remarks or comments(9) Name of co-driver(10) Total hours for each duty status: Off Duty, Sleeper Berth, Driving and On Duty Not Driving(11) Shipping document number(s), Shipper Name and Shipper commodity <p>The above is enabled through automatic recording of duty status updates by the dēzl and the transmission of driver profile and duty status information between the dēzl and the partner's transponder device. Please refer to chapter 3 for a description of the communication supported between the dēzl and the partner's transponder device.</p> <p>HOS records are available for display on the dēzl and may be exported as a file stored on an SD card or on the dēzl.</p> <p>The exported file conforms to the format of Records of Duty Service (RODS) specified by Appendix A to Part 395 for those data fields which apply to AOBRD only. This file can be retrieved by an external computer via a USB connection.</p>
(b)(4)	<p>Capability for the driver to have in his/her possession records of duty status for the previous 7 or 8 consecutive days available for inspection while on duty.</p> <p>These records are available for display on the dēzl and may also be exported to a file stored on an SD card or on the dēzl.</p> <p>The exported file conforms to the format of Records of Duty Service (RODS) specified by Appendix A to Part 395 for those data fields which apply to AOBRD only. This file can be retrieved by an external computer via a USB connection.</p>
(b)(5)	Responsibility of driver when using hard copies to record hours-of-service.

(c)(1-4)	<p>The dēzl records and denotes a driver's duty status as follows:</p> <ol style="list-style-type: none"> (1) Off Duty (2) Sleeper berth (3) Driving (4) On Duty not driving
(c)(5-13)	<p>The dēzl supports recording of the following additional information when recording hours-of-service:</p> <ol style="list-style-type: none"> (5) Date of duty status change (6) Total miles driving today (displayed on the dēzl) (7) Truck or tractor and trailer number (8) Name of carrier (9) Main Office Address (This data is not recorded by the dēzl. That requirement is the responsibility of partner's AOBRD solution.) (10) 24 hour period starting time (11) Name of co-driver (12) Total hours for each duty status: Off Duty, Sleeper Berth, Driving and On Duty not driving. (13) Shipping document number(s), Shipper Name and Shipper commodity
(d)(1)	<p>The dēzl automatically records name of city, town, or village, and state for each change of duty status by the driver.</p>
(d)(2)	<p>The dēzl automatically records name of city, town, or village, and state as specified by subparagraph (d)(1).</p>
(e)	<p>Not applicable. Responsibility of driver when using hard copies to record hours-of-service.</p>
(f)	<p>Responsibility of driver when AOBRD device is non-operational and records of duty service must be re-constructed. Since the dēzl automatically reports hours-of-service updates to a partner's telematic data transponder device, HOS records can be easily reconstructed using supporting systems that receive the updates.</p>
(g)(1)	<p>A description of all HOS functionality is included in the instructions available on the dēzl. A manual may also be downloaded from Garmin's website and printed to a hard copy which may be stored in the motor vehicle.</p>
(g)(2)	<p>Responsibility of motor carrier.</p>
(h)(1-3)	<p>Duty status changes are submitted as follows by the dēzl:</p> <ol style="list-style-type: none"> a) All duty status changes updated by the driver are transmitted immediately to the partner's transponder device connected to the dēzl. b) All validations of duty of status changes performed by the driver are submitted immediately to the partner's transponder device. c) In addition to automatic transmission of HOS updates, complete HOS logs recorded by the dēzl may be exported on demand via USB to an external computer or SD card.
	<p>The dēzl also informs the driver of any duty of status changes that have not been verified in the last 10 days.</p>
(i)(1)	<p>Responsibility of the AOBRD solution provider.</p>
(i)(2)	<p>The dēzl does not allow updates of duty status while the vehicle is in motion.</p>
(i)(3)	<p>The dēzl does not allow the driver to alter information recorded concerning driver's hours-of-service. Only comments can be added to each duty status change.</p>
(i)(4)	<p>When connectivity is lost with the partner's transponder device the dēzl behaves as follows:</p> <ul style="list-style-type: none"> • A visual indicator is displayed informing the driver the dēzl has no connectivity with the partner's transponder device. • When HOS updates are performed by the driver, the driver is informed that the dēzl is unable to send HOS updates to the partner's transponder device. <p>Additionally, errors encountered by the dēzl while recording hours of service records are transferred to the partner's transponder device.</p>

(i)(5)	The dēzl supports electronic display of driver's HOS for the previous 7 or 8 days including the following information: <ul style="list-style-type: none"> (i) Driver's total hours of driving today recorded by the dēzl (ii) Total hours on duty today (iii) Total miles driving today (iv) Total hours on duty for the 7 consecutive day period, including today (v) Total hours on duty for the 8 consecutive day period, including the present day (vi) The sequential changes in duty status and the times the changes occurred for each driver using the dēzl
(i)(6)	The dēzl supports recording of multiple driver duty status.
(i)(7)	Duty of service records cannot be altered on the dēzl. Only comments can be edited. Errors encountered by the dēzl while recording duty of service records are transferred to the partner's transponder device.
(i)(8)	Software updates are made available by Garmin to registered customers as necessary for the dēzl. Re-calibration is not necessary for Garmin's HOS application.
(i)(9)	Responsibility of motor carrier.
(i)(10)	Responsibility of motor carrier.
(j)(1-2)	Responsibility of motor carrier.

3 Garmin dēzl™ Communication to Partner's Transponder Device

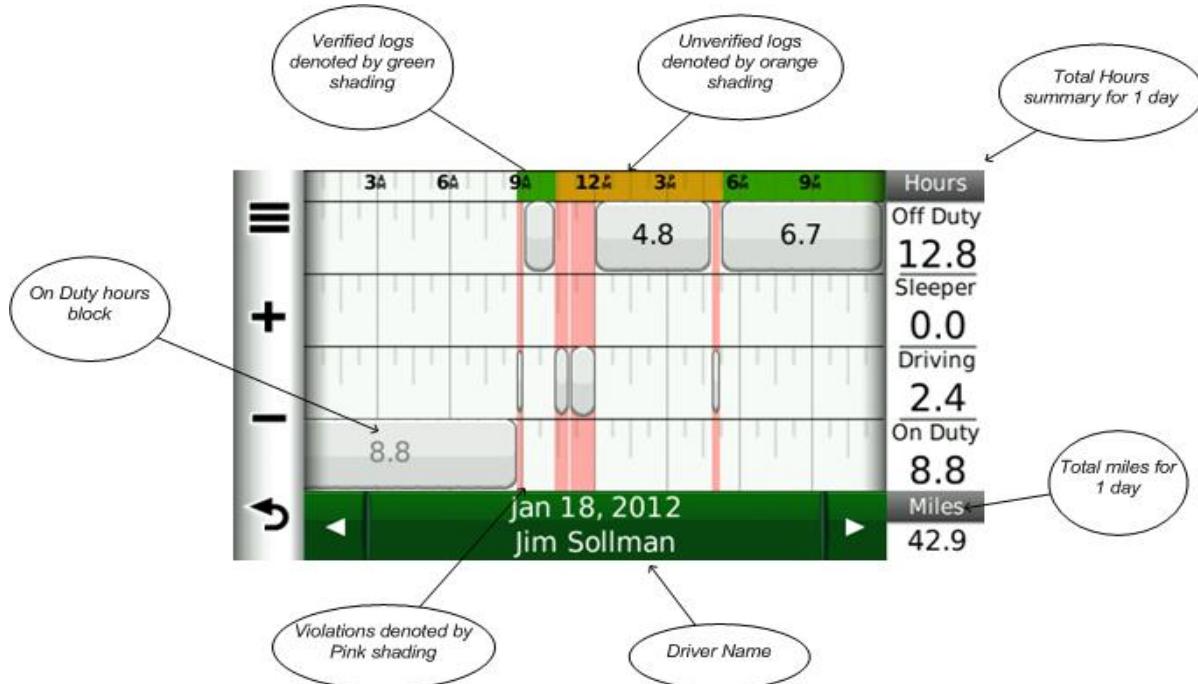
Once an authorized partner has implemented and enabled the Garmin Fleet Management Interface AOBRD protocol, the following communication is enabled between the dēzl and the partner's telematic data transponder:

- Authentication of the driver when the driver logs in to use the HOS application.
- Duty status updates performed by the driver.
- Validations of duty status updates performed by the driver.
- Annotations to duty status records performed by the driver.
- Update of shipment data performed by driver.
- Download of driver profiles from supporting systems at the request of the dēzl.
- Synchronization of the vehicle odometer with the dēzl at the request of the partner's transponder device.
- Download of an 8 day driver log from supporting systems at the request of the dēzl.

Transport of information associated with the above operations will allow a motor carrier to deploy an AOBRD solution supporting seamless transfer of HOS information and further enable the motor carrier to meet §395.15 requirements. Please refer to the Garmin Fleet Management Interface AOBRD protocol specification for implementation details and the identification of all data associated with the above operations.

4 Garmin dēzl™ Hours-of-Service Examples

The following represents an example of a single day summary of hours-of-service for a single driver displayed by the dēzl 560:



The following represents an example of a 7 day summary of hours-of-service for a single driver:

